

1990

Northeastern Illinois University Catalog, Academic Year 1990-1991

Northeastern Illinois University

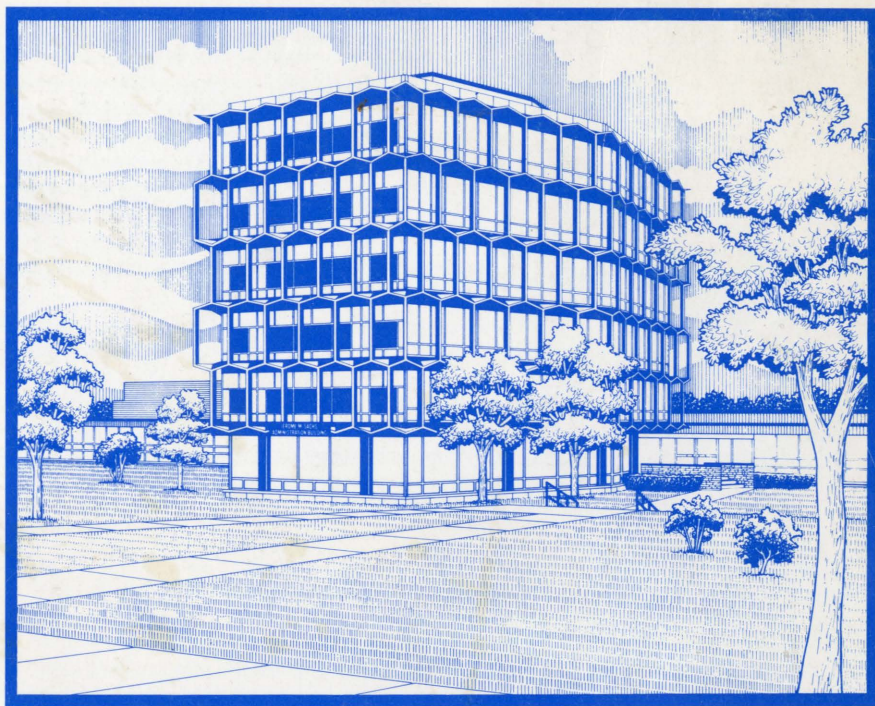
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Northeastern Illinois University Catalog



Academic Year 1990-1991

GENERAL INFORMATION 1990-1991

NORTHEASTERN ILLINOIS UNIVERSITY
5500 N. ST. LOUIS
CHICAGO, ILLINOIS 60625
Telephone: 312/583-4050

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Barbara A. Hursh, Provost
Donn H. Bichsel, Vice President for Development and Public Affairs
Melvin C. Terrell, Vice President for Student Affairs
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One Non-Voting Student from Each Institution

This issue of the Northeastern Illinois University Catalog is for the academic period 1990-1991.

Provisions of this catalog are not to be regarded as irrevocable contractual commitments between Northeastern Illinois University and the student. The university reserves the right to change any provisions or requirements contained herein at any time within the student's term of residence.

Northeastern Illinois University subscribes to the principles of equal opportunity and affirmative action and does not discriminate against any individual on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran status.

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THE UNIVERSITY

Northeastern Illinois University is a fully accredited public university serving the Chicago metropolitan area. Total graduate and undergraduate enrollment is approximately 10,000.

In addition to offering traditional programs in the arts, sciences, business, and education, Northeastern has a strong commitment to innovative, non-traditional education and has been a leader in the development of special programs for adult learners.

Northeastern is one of five senior institutions of higher education under the direction of the Board of Governors of State Colleges and Universities in Illinois.

ACCREDITATION

Northeastern Illinois University is accredited by the North Central Association of Colleges and Secondary Schools, the National Council for Accreditation of Teacher Education, and the Department of Public Instruction of the State of Illinois.

FACULTY

Northeastern employs approximately 365 full-time and 160 part-time faculty who are committed to excellence in teaching. Their varied academic backgrounds and professional accomplishments provide students with many learning opportunities.

HISTORY OF THE UNIVERSITY

Northeastern Illinois University traces its origin to the beginnings of teacher training in Illinois. Founded in 1867 in Englewood as the Cook County Normal School, the institution has evolved into the comprehensive university that it is today. Its campus at 5500 N. St. Louis Avenue opened in 1961.

In 1961, total enrollment was 1,348 students pursuing the bachelor of arts or bachelor of science degrees although the major concentration was primarily in education. Throughout the 1960's, enrollment increased, programs were expanded, and the institution's mission broadened. In 1971, with a total

enrollment of approximately 7,000, the college became Northeastern Illinois University.

Since 1970 there has been rapid growth at Northeastern. New construction includes a science building, a four story classroom building, a new building to house the physical plant, a centrally located Commuter Center (student union), several new parking lots, and a modern, comfortable four story library which contains approximately 580,000 volumes.

In 1973, with the acquisition of adjoining property, the campus grew to 67 acres. Its location in the center of an attractive residential neighborhood, eight miles northwest of downtown Chicago, twenty minutes from O'Hare Airport, convenient to expressways and public transportation, makes Northeastern an ideal campus for commuter students.

ORGANIZATION OF THE UNIVERSITY

The President of the University is accountable to the Chancellor and the Board of Governors for the administration of the institution and has full power and responsibilities within the framework of board policies for the organization, management, direction, and supervision of the university.

The President is assisted by the Provost (Academic Affairs) and three vice-presidents (Administrative Affairs, Development and Public Affairs, and Student Affairs).

Under separate constitutions, faculty and students participate in the governance of the university through the Faculty Senate, Student Government, and by membership on various standing and ad hoc committees that consider and recommend policies and procedures to the president.

AFFIRMATIVE ACTION

The Affirmative Action Office, Room C-219, focuses on issues relating to diversity. It is responsible for addressing student and employee concerns relating to harassment and discrimination on the basis of age, color, disability, national origin, race, religion, gender, sexual orientation, or veteran status.

ACADEMIC AFFAIRS

The Office of Academic Affairs is responsible for instruction, academic programs and academic support services. Academic programs are offered through the College of Arts and Sciences, College of Education, College of Business and Management Graduate College, and the Center for Individualized Studies. Instructional support services are provided by the Library, University Media Services, Admissions and Records, Academic Computing, the Academic Advisement Center, the Tutoring Center, and the Office of Academic Development.

In addition, the office of Academic Affairs is administratively responsible for the Center for Inner City Studies.

ADMINISTRATIVE AFFAIRS

The Office of Administrative Affairs and its departments provide support and service to the academic departments and to the entire university community. Responsibilities of this office include supervision of the offices of Budget and Finance, Facilities Management, Institutional Studies and Planning, Personnel, University Computer Services, Public Safety and Internal Audit.

DEVELOPMENT AND PUBLIC AFFAIRS

The Development and Public Affairs area provides service and support to members of the university community. This area includes the departments of Alumni Affairs, Development, Sponsored Programs, and University Relations. Activities of the Northeastern Illinois University Foundation and the Alumni Association are also coordinated by this area.

STUDENT AFFAIRS

The Division of Student Affairs is committed to fostering the personal growth and development of Northeastern Illinois University students. Through a strong co-curriculum and extensive student support services, the Student Affairs Division places particular emphasis on helping students develop leadership skills, interpersonal skills, and decision-making and problem-solving skills. Additionally, the Student Affairs staff provides a comprehensive array of programs and services to facilitate the physical, emotional, social, occupational, intellectual, and spiritual well-being of students.

Students are encouraged to become familiar with the wide range of opportunities available and to complement their academic experiences through the use of these services and active participation in co-curricular activities and the other programs offered through the following Student Affairs offices:

Child Care Center	Health Service
Commuter Center	-Student Health Insurance
(Book Store and Food Services)	Placement
Counseling	Student Activities
Dean of Students	University Events
Financial Aid	Women's Services

DEAN OF STUDENTS

The Office of the Dean of Students provides a wide variety of programs and services designed to (1) establish a campus climate where diversity is encouraged and individual differences are respected; (2) facilitate the successful transition of entering students to the University; (3) enhance student growth and development; and (4) help students exercise leadership and take responsibility for their actions.

Programs and services of the Dean's Office include:

- Alcohol and Substance Abuse Prevention (programming, counseling and referral to on and off-campus resources)
- Coordination of Student Due Process and Judicial Affairs
- Fraternity and Sorority Affairs
- International Student Services
- Minority Student Mentoring Program
- National Student Exchange Program
- New Student and Parent/Family Orientation
- Peer Helper Program
- Research on Students and Student Needs
- Veterans Affairs

In addition, the Dean of Students Office serves as a "universal starting point" for students who need assistance in exploring and addressing their concerns, complaints, suggestions, and grievances.

COUNSELING OFFICE

The Counseling Office, staffed by professional counselors with various backgrounds, provides developmental and support services to any Northeastern student, faculty, or staff member. Because University commuter students often have to balance the different responsibilities of school, work and home, they may face heavy and sometimes conflicting demands on time and resources. The counseling staff can help in the often difficult task of sorting out these demands. **Career counseling** is available in individual sessions, in group workshops, or in a credit course to help students assess their career interests and values and put this information to use when choosing an academic major or career direction. **Personal counseling** is private, confidential assistance to help students understand their feeling and personal problems, overcome stress, or find better ways of handling interpersonal relationships. **Academic counseling** provides information about University policies and answers to general questions. Additionally, the office provides help with issues of substance abuse and conflict resolution to all students and staff. If the office cannot provide the appropriate assistance, counselors can make referrals to on- or off-campus resources.

Students may obtain a "walk-in" consultation or make an appointment to see a specific counselor during both daytime and selected evening hours. Counselors may arrange individual, group, or couples-based sessions, depending on the nature of the need and the current range of on-going services. Counselors may use various testing and assessment instruments to provide information and help students learn more about themselves. These instruments can include career and personality inventories, as well as a computer-based career guidance system.

The Counseling Office is located in B-115 (B-Wing) and can be reached by telephone at 794-6269 or at the campus extension 6269.

CHILD CARE CENTER

The Northeastern Illinois University's Child Care Center, located on campus, accepts children 15 months through 6 years. Operating Monday through Friday from 7:00 am to 6:00 pm, the center offers both half- and full-day sessions. Licensed by the State of Illinois Department of Children and Family Services, the program provides quality early-childhood education in keeping with the best accepted methods and principles of child care. Contact the Child Care Center at extension 3079 for registration and fee information.

COMMUTER CENTER

The Commuter Center houses services such as the cafeteria, the book store, lockers, and study space. It has meeting facilities for campus organizations as well as space for social and recreational events. providing a focus for the student life of Northeastern's urban commuters, the Center offers programs to enrich the educational experiences of the University community and features comfortable surroundings for informal study and relaxation. Staff may be reached at extension 4615.

Commuter Center Facilities Guide

Main floor:

- Alumni Hall (multi-purpose room)
- Book Store
- Bulletin Boards
- Center Desk
- Coin Operated Copiers
- Megaform Seating
- Public Telephones
- Vending

Lower level:

- Cafeteria
- Game Room
- General Publication Rooms
- Independent** (student newspaper)
- WZRD (student radio station)
- Vending

Upper level south:

- Director, Commuter Center
- Assistant Director, Commuter Center
- Coordinator, University Events
- Master Calendar of Activities
- Quiet Lounge for Relaxing or Study
- Room Reservationist
- Six Meeting Rooms
- Vending Manager

Upper level north:

- Activities Board
- Activities Program Advisor
- Director of Student Activities
- Student Organizations' Mail Boxes and Work Space
- Student Senate

OFFICE OF FINANCIAL AID

Northeastern Illinois University makes every effort to extend financial assistance to qualified students in need of funds to complete their education. The office of Financial Aid, located in D-201, (at extension 3560) offers assistance in meeting these expenses through loans, grants, scholarships, and student employment programs. Basic information about aid sources most commonly available to Northeastern students is listed below. Please refer to the Financial Aid Facts brochure for more detailed information.

How To Apply For Financial Aid

To be considered for financial aid, students must apply **each year** by completing one of the following forms:

ACT—Family Financial Statement (\$7.00 fee)

or

USA Funds—Singlefile form

Students who have completed their financial aid files by April 2 will receive priority consideration.

NOTE: Applicants and their parents should be prepared to furnish any information verifying data on the application. This may include tax returns for the previous year and, in some cases, applicants' tax returns dating to 1985. Students who have completed their financial aid files before April 2 will receive priority consideration for campus-based financial aid (CWS, SEOG, Perkins Loan) if they qualify.

This deadline applies to all students requesting aid for the Fall, Spring and Summer terms or any combination thereof. Awards may be made after the deadline if monies are still available. Pell Grant, ISAC, and Stafford Loan applications are also reviewed in date order. Although the amounts of these awards are not determined by the date priority, early applicants will receive their monies first.

Additional information concerning financial assistance and deadlines can be obtained by contacting the financial aid office, 794-2900.

PROGRAMS	ELIGIBILITY	DESCRIPTION OF PROGRAM	REPAYMENT	OFFICE TO CONTACT
Illinois Monetary Award (ISAC)	(Undergraduate) Must be resident of Illinois and enroll for at least six credit hours. Based on need only. Must be enrolled in a degree program. Expires after eight (8) terms of use.	Applies to tuition and fees only. Must apply annually.	No repayment obligation.	High school guidance departments or Northeastern's Office of Financial Aid or ISAC 160 N. LaSalle 793-3745
Special Teacher Education Scholarship for High School Graduates and for Certified Teachers	(undergraduate and graduate) Limited availability to students expressing intent to take courses in preparation for teaching special education. No need analysis required.	Maximum: four years. Pays tuition and activity fees.	Repayment to state is necessary if teaching career not pursued.	High school guidance departments. Department of Special Education, or Cook County Superintendent's office.
ISAC Merit Recognition Scholarship	Students must be in the top 5% of their high school class for the 7th and 8th semesters. Eligible students will be sent an application in the summer after high school graduation.	\$500 award, renewable once for sophomore year upon successful completion of 3.5 GPA on 5.0 scale.	No repayment obligation.	ISSC 106 Wilmot Road, Deerfield, IL 60015; (708) 948-8550.
Illinois General Assembly Scholarship	Financial need usually not a factor.	Each member of the Illinois General Assembly is authorized to award the equivalent of two, 4-year scholarships annually to his/her constituents.	No repayment obligation.	State Senator or Representative.
Pell Grant (Federal)	(undergraduate) Minimum of six credit hour enrollment. Must show need. Must be a U.S. citizen or permanent resident or intend to become a permanent resident. Must be enrolled in a degree program. Must apply annually.	Applies to tuition & fees plus other educational expenses. 1989-90: \$2300 max per year \$1150 max per term	No repayment obligation.	Northeastern's Office of Financial Aid, high school guidance offices, post offices, libraries, etc.
Supplemental Educational Opportunity Grant (Federal)	(undergraduate) Limited availability. Must show exceptional need. Must be enrolled in a degree program.	Program is considered a source of grant funds to supplement other federal aid programs such as the basic grant described immediately above if the student continues to show need.	No repayment obligation.	Northeastern's Office of Financial Aid.
Graduate Tuition Waiver	(graduate)	Pays tuition only. Need based. Must be enrolled for nine credit hours.	No repayment obligation.	Northeastern's Office of Financial Aid.
Graduate Merit Tuition Waiver	(graduate)	Pays tuition only.	No repayment obligation.	Northeastern's Graduate College and individual departments.
UNI Talent Scholarship (Art, Music, Athletic, etc.)	(undergraduate) Limited availability. Two letters of recommendation from persons qualified to evaluate talent. Approval of Northeastern Talent Committee. No needs analysis required.	Maximum: Four years of tuition payment. Reapply annually.	No repayment obligation.	Northeastern's Office of Financial Aid.
Board of Governors Emergency Institutional Waiver (Resident and Non-Resident)	(undergraduate) Financial need as shown by needs analysis.	Covers tuition only - availability depends on monies in the institutional budget.	No repayment obligation.	Northeastern's Office of Financial Aid (scholarship area).
Teachers of Secondary Science or Math	Certified Teacher who wishes to prepare for teaching secondary math or science. Full or part-time.	Pays tuition.	Repayment to State is necessary if teaching math or science not pursued.	Department of Education.
Cooperating Teacher Certificate	Current teachers who have supervised a UNI student teacher in a classroom setting arranged through Office of Clinical Experiences & Student Teaching.	For each student teacher supervised the cooperating teacher will be waived tuition for one 3 credit hour class.	No repayment obligation.	UNI Office of Clinical Experiences & Student Teaching, Extension 5145.
Scholarship for Children of Deceased Faculty/Staff	(graduate and undergraduate)	Covers tuition and fees.	No repayment obligation.	Northeastern's Office of Financial Aid (scholarship area).
Bureau of Indian Affairs	(undergraduate and graduate) Must be a native American and show financial need.	\$500 to \$1,500 or more, depending upon monies available to the bureau.	No repayment obligation.	Directly from student's tribal office or Northeastern's office of Financial Aid (scholarship area).

PROGRAMS	ELIGIBILITY	DESCRIPTION OF PROGRAM	REPAYMENT	OFFICE TO CONTACT
Dependents of POW's and MIA's Scholarship	(undergraduate and graduate) Students who are dependents (spouse and/or children) of Illinois residents, officially declared prisoners of war, missing-in-action, killed, or 100 percent disabled since January 1, 1960.	Covers tuition and fees.	No repayment obligation.	Illinois Veterans Commission, Springfield, Illinois.
ROTC Scholarships	(undergraduate and graduate) Based on merit.	Covers tuition up to four years.	No repayment obligation.	U.S. Army ROTC: Loyola University (508-2675); U.S. Air Force ROTC: Illinois Institute of Technology (567-3525).
Private Scholarships	(undergraduate and graduate) Need, merit, ethnic group, religious group, etc.	The amounts vary according to the award.	No repayment obligation.	Various outside sources such as: Pullman Foundation, Ford Foundation. Refer to UNI Financial Aid Office.
Student Aide Employment	(undergraduate and graduate students)	All enrolled students are eligible to apply for part-time on-campus employment.	Not applicable.	Northeastern's Office of Student Employment (D-024).
Work Study Employment	(undergraduate and graduate) Enrolled full or half-time. Eligibility of students is determined by approved needs-analysis methods. Must be enrolled in a degree program.	Federally funded on-or-off-campus employment. Off-campus employment is arranged through the Office of Student Employment with public and/or private not-for-profit agencies operating in the public interest.	Not applicable.	Northeastern's Office of Student Employment (D-024).
PERKINS LOAN (NDSL) (Federal)	(undergraduate and graduate) Enrolled full or part-time. Must be enrolled in a degree program. Must show need.	Maximum \$4500 aggregate first two years: \$9000 an undergraduate	Long-term repayment-5 percent interest-cancellation of debt privileges under certain specific conditions.	Northeastern's Office of Financial Aid.
Illinois Guaranteed Loan Stafford Loan (GSL) (State)	(undergraduate and graduate) Enrolled full or part-time. Must be citizen or permanent resident of the United States and resident of the state of Illinois.	Maximum per academic level: Fresh - Soph: \$2625 Jr - Sr: \$4000 Grad - : \$7500	Long-term repayment (no cancellation privilege for teachers) eight (8) percent interest	Northeastern's Office of Financial Aid.
Emergency Loan Fund (Northeastern)	(undergraduate and graduate) Must have emergency need and a validated bill for the current term.	Maximum \$100	Thirty-day repayment-no interest. Fifty cent service charge.	Northeastern's Office of Financial Aid or Loan Office.
Illinois Veterans Scholarship (State)	(undergraduate and graduate) Veterans must complete appropriate application form and furnish one copy of their official separation form (DD-214) which demonstrates: 1) Illinois residency until at least six months prior to induction; 2) served on active duty in the Armed Forces for at least one year at any time since 1940; and 3) returned to Illinois within six months after discharge.	Tuition waiver and some fees for an equivalent of four years of enrollment at any state university or Illinois public community college. Such enrollment may be on a part-time or full-time basis over a maximum of 12 years.	Not applicable.	Northeastern's Office of Financial Aid.
Illinois National Guard/Naval Militia	(undergraduate and graduate) Enlisted member who has served at least one year in the Illinois National Guard or Naval Militia.	Payment of tuition and fees at any state school. Students may enroll full or part-time.	Not applicable.	Contact the Illinois Army National Guard Information Center, 234 E. Chicago Ave., Chicago, 60611; (312) 861-1811.

NOTE: Two documents of identification, one of which must be the University ID, are required in order to pick up Financial Aid and Emergency Loan checks.

Financial Aid Satisfactory Academic Progress Policy

Progress: In accordance with Federal and State regulations, Northeastern Illinois University is required to establish an academic progress policy for students receiving funds in the following programs:

Pell Grant

Illinois State Scholarship (ISSC)
Supplemental Educational Opportunity Grant (SEOG)
Perkins Loan
College Work-Study
Stafford Loan program (GSL)
Illinois Veteran Grant Program (IVGP)
Illinois National Guard Scholarship

Students who are not in compliance with the policy will be ineligible for monies in the above-mentioned programs.

Policy Statement: Financial aid may be terminated if students:

1. do not successfully complete seventy-five percent (75%) of their minimum full-time (12 hours) and/or part-time (6 hours) enrolled credit hours during the award year.*

2. do not self-pace their educational objectives within the designated "Maximum Time Frame":

A. **Undergraduates** - All undergraduates who have earned a total of 150 hours or more prior to the term in question, are not eligible to receive monies in the programs listed above.

B. **Graduates** - All graduate students who have earned a total of 54 credit hours or more prior to the term in question, are not eligible to receive monies in the programs listed above.

3. unofficially or officially completely withdraw from classes.

If a student's financial aid is terminated, he/she may appeal to the Director of Financial Aid.

* An award year includes the period from July 1 to June 30. This requirement applies to all terms within the award year even if monies were not received in any of these periods.

Tuition Waivers For Graduate Students

Based upon the adequacy of annual funding, tuition waivers will be available to graduate students who demonstrate (1) financial need (administered by the Office of Financial Aid), or (2) academic achievement and service in an academic department (administered by the Graduate College).

To be eligible for a tuition waiver, candidates must have a bachelor's degree from an accredited college or university. Students who receive need-based waivers must maintain full-time enrollment.

Students receiving waivers based on academic achievement must be enrolled in a minimum of three credit hours each term.

Additional information and applications are available in the respective administrative offices indicated above.

HEALTH SERVICE

The Health Service Office provides for the health needs of the university community (students, faculty, staff and visitors) by promoting wellness through direct personal care, referral and education.

A registered nurse is on duty during hours classes are in session, including evenings and Saturday until noon.

There are no fees for any of the services, tests or literature that are available in the Health Service Office. The university assumes no responsibility for treatment given in agencies referred outside the office.

If you require
a handicapped parking permit

health counseling

a loan of a cane or crutches

nutritional and/or weight loss guidance

screening for hypertension, hearing, vision, pregnancy

a definitive test for strep throat

assistance with medication identification

information on a claim for Student Health Insurance

or

have "special" medical needs

come to G-138 - Health Service - Extension 3453.

Student Health Insurance

All **full-time undergraduates** are automatically covered by Student Health Insurance, and the semester cost is included in their fees. Students who have equal or better health insurance may cancel the insurance fee by completing a waiver card which accompanies the tuition bill and submitting it according to the directions.

Part-time students, **graduate** students, and students wishing to insure their **dependents** may apply for this coverage by completing an application form in Health Service (G-138, west of the book store), extension 3453.

In the event illness or injury necessitates filing a claim, claim forms also are available in the Health Service Office (G-138), which is open during all hours of scheduled classes, including evenings and Saturdays until noon.

PLACEMENT OFFICE

The Placement Office assists Northeastern students in developing satisfactory careers, by referring undergraduates (typically late sophomores and juniors) to internship and co-operative education opportunities. The office encourages students to explore careers and real-world settings. The office also prepares soon-to-graduate seniors and graduate students for appropriate and satisfying job placement. Placement Office professionals assist students in selecting and using the outstanding resources available in the Placement Office Library housed in B-117. These resources include instructional videos, books, magazines, and timely articles. Placement Office staff may be reached at extension 3119.

Student job seekers also receive specialized services in resume writing and interview skills workshops, opportunities for on-campus interviews by company/agency recruiters, a computerized job matching system, bi-weekly listings of job openings in the Chicago area and elsewhere, access to Northeastern and Chicago-area job fairs, and continually updated job market reports and salary surveys.

Education majors, during their student teaching semester, may attend seminars on placement opportunities in teaching and receive detailed instructions for establishing professional teacher credential files. All first-semester seniors should register for placement services.

STUDENT EMPLOYMENT OFFICE

Northeastern students seeking part-time or summer employment, on or off campus, may apply at any time through the UNI Student Employment Office, located downstairs of the cashier's area in Room D-024, at extension 3527. Approximately 1300 placements are made each year.

Jobs are available to help students meet expenses, gain career-related experience, or both. Certain jobs, such as those provided by the College Work Study Program, are based on need demonstrated through an approved Financial Aid application. Work-Study jobs are posted on the bulletin board in the corridor adjacent to the Student Employment Office.

Other University jobs (Student Aide Program), open to all students who are enrolled at least half time regardless of their financial circumstances are also posted on the bulletin board adjacent to the Student Employment Office.

Off campus jobs in the private sector (Job Location Program) are also available through the Student Employment Office and are posted on the large bulletin boards north of the entrance to the Office of Admissions.

STUDENT ACTIVITIES

The Office of Student Activities provides students and faculty with consultation and assistance in organizational management, leadership training and informal learning experiences. Moreover, the Activities Office provides facilities, organizational assistance, advice and direction to help students plan a well-rounded program of activities for personal growth and enrichment of the student body and campus community. Staff may be reached at extension 3868.

UNIVERSITY EVENTS

The University Events Office coordinates all of the functions and support services for centralized special events sponsored by the academic, administrative and student communities.

This office provides assistance in planning, producing and promoting university events, as well as providing consultation for productions of university-wide events such as commencement, orientation, workshops, conferences, etc.

The University Events Office monitors the use of university facilities by on-campus individuals and groups and is the initial contact for off-campus agencies requesting use of Northeastern's facilities. Copies of the *Use of University Facilities Policies* may be obtained in the University Events office, extension 4658.

WOMEN'S SERVICES

The Office of Women's Services provides guidance, advocacy and referrals to women students, faculty and staff members. Women's Services offers assistance with the unique issues that women may encounter in their academic and personal lives. Further, the office sponsors support groups, workshops, and classes concerning such topics as assertiveness, sexual assault, self-defense, and women's health issues. Sexual harassment complaints should be directed to the Office of Women's Services, extension 3567, and to the Affirmative Action Office. Additionally, New Directions: A Program for Returning Adults, is sponsored by the Women's Services Office. This program helps both male and female students through the initial re-entry period and role transition of returning to college. New Directions offers activities such as orientation sessions, study strategies workshops, and support groups for single parents and returning students.

ADMISSIONS

GENERAL INFORMATION

Factors considered in evaluating an applicant for admission to Northeastern include: the high school program of studies, rank in class, standardized test scores, recommendations from high school personnel and previous college work.

ADMISSIONS REQUIREMENTS AND APPLICATION PROCEDURES

CLASSIFICATION AND DEFINITION	REQUIREMENTS FOR ADMISSIONS	HOW TO APPLY FOR ADMISSION
Freshman A student currently attending high school or a high school graduate who has never attended a college or university. or A student who has satisfactorily passed the G.E.D.	The applicant must have graduated from a regionally accredited high school or have a passing grade on the G.E.D. ACT scores are required of all incoming freshmen unless they are 21 years of age or older. Admission is based on high school rank in class, supporting ACT or SAT scores, and high school program of studies. To be admitted, students must rank in the top half of their graduating class, or have a minimum enhanced ACT composite score of 19, or a minimum SAT score of 750, and successful completion of a required program of high school studies.	1. Submit application for admission to the Office of Admissions. 2. Request that one copy of your official high school transcript and ACT scores be sent directly to the Office of Admissions. 3. Veterans must submit one copy of their DD214. 4. Submit GED scores (if applicable). 5. Resident Aliens must submit a photocopy of both sides of their Resident Alien card.

ADDITIONAL SUBJECT REQUIREMENTS FOR FRESHMEN ENTERING IN 1988/92

FALL 1988/92 BOG SUBJECT REQUIREMENTS

In addition to meeting the ACT or class rank requirements for admission, freshmen must also have completed the following high school subjects:

- 3 years of college preparatory English
- 2 years of college preparatory Social Studies courses
- 2 years of college preparatory Mathematics
- 2 years of college preparatory Natural Science courses
- 3 years of college preparatory work in some combination of computer science, fine arts, foreign languages, or additional work in the above areas.

FALL 1993 IBHE SUBJECT REQUIREMENTS

For freshmen entering in the Fall 1993 the following minimum high school subjects will be required:

- 4 years of English (emphasizing written and oral communications and literature)
- 3 years of Social Science (emphasizing history and government)
- 3 years of Mathematics (introductory through advanced algebra, geometry, trigonometry, or fundamentals of computer programming)
- 3 years of Science (laboratory science)
- 2 years of foreign language, music or art

PROVISIONAL ADMISSION

Freshmen may be admitted on a provisional basis to the university. The following policies will be in effect to deal with the matter of course deficiencies for students admitted provisionally.

- The following categories of students are exempt from this policy.
 - Those who graduated from high school five or more years before applying to college.
 - International Students
 - Students with G.E.D.
- For Fall 1990, a maximum of four (4) course deficiencies will be permitted. Special Programs, the Center for Inner City Studies, El Centro, the University Without Walls, and the Board of Governors/BA program will be exempt from this policy.
- Students who are not exempt from the four course deficiency limitation are encouraged to attend a community college to remove the deficiencies before transfer to Northeastern.
- Students admitted to Northeastern Illinois University with course deficiencies may remove these via the institutional testing and placement programs established in English and Mathematics.
 - The results of test scores and/or the consent of the academic advisor will determine the appropriate number, type and level of course(s) the student will need to complete.
- All students admitted provisionally, regardless of intended major, are required to sit for the Mathematics Placement examination.
- Students will earn credit toward graduation for successfully completed courses which remove course deficiencies, except for courses at the pre-100 level.
- Courses taken to remove deficiencies cannot be used to meet the 42 hour General Education requirement.
- Students with course deficiencies must register for at least one "deficiency-removing" course each term, in order to register for any other courses.
- A score of 20 or higher on the ACT taken prior to October, 1989 or a score of 21 on the Enhanced ACT taken on or after October, 1989 in a curricular area in which a deficiency exists will serve to offset the deficiency.

CLASSIFICATION AND DEFINITION	REQUIREMENTS FOR ADMISSIONS	HOW TO APPLY FOR ADMISSION
Transfer A student who has at some time registered at an institution of higher learning following high school graduation whether or not any college-level work was completed.	The applicant must have an overall "C" average in all course work attempted and be in good academic standing at the last school attended full time. Students with less than 30 semester hours of college credit must also meet freshman requirements.	1. Submit application for admission to the Office of Admissions. 2. Request that official transcripts from each college or university attended be sent directly to the Office of Admissions. 3. Students with less than 30 semester hours of college credit must also submit a high school transcript and ACT scores. 4. Veterans must submit one copy of their DD214. 5. Resident Aliens must submit a photocopy of both sides of their Resident Alien card.

Second Bachelor's Degree

A student who has earned a bachelor's degree and wishes to earn a second undergraduate degree.
 NOTE: Students will receive registration priority after undergraduate students. Tuition and fees will be assessed at the graduate student rate.

Evidence of graduation from an accredited college or university.

- Submit Northeastern undergraduate application form.
- Request that an official transcript be sent showing graduation from the college or university which awarded the previous degree.
- Resident Aliens must submit a photocopy of both sides of their Resident Alien card.

CLASSIFICATION AND DEFINITION	REQUIREMENTS FOR ADMISSIONS	HOW TO APPLY FOR ADMISSION
Readmission Any former Northeastern undergraduate who has not attended for two consecutive terms must apply for readmission. Students who were dropped for poor scholarship at the time of last attendance must petition the Academic Standards Committee in writing. NOTE: Undergraduate students who reenter the university after an absence of two or more full terms must meet the requirements of the current catalog, unless he/she has received written approval from the dean of the college in which he/she is enrolled, to continue under the contract of a previous catalog.	Good standing at the time of last attendance at Northeastern. Students who have enrolled at other institutions since leaving Northeastern must have an overall "C" average and be in good standing at those institutions.	1. Submit an application for admission. 2. Request that copies of official transcripts be sent from any colleges attended since leaving Northeastern. 3. Resident Aliens must submit a photocopy of both sides of their Resident Alien card with each application. 4. International Students must submit a new/updated Northeastern Financial Statement and required supporting documents.
International Students Students from other countries who carry an F or J visa. International students are eligible for admission to degree programs only and may not be admitted as students at large. NOTE: Students must complete their files two months prior to the beginning of classes in order to insure proper processing of I-20 forms. An I-20 will not be issued until the student has received notification of admission from Northeastern's Office of Admissions. At no time will any student on an F or J visa be eligible for resident tuition assessment. Students who are out-of-status will not be considered for admission.	Satisfactory educational record. Satisfactory score on TOEFL*. Evidence of financial support to meet financial needs during their enrollment at Northeastern as reflected on Northeastern's financial statement. The TOEFL* is required of international students who carry an F or J visa. *Test of English as a Foreign Language.	In addition to the above application procedures, international students must also submit: 1. TOEFL scores—minimum score required is 500. 2. Northeastern Illinois University Financial Statement and required supporting documents. All Financial Statements and supporting documents must be in exact U.S. dollar amounts.

CLASSIFICATION AND DEFINITION	REQUIREMENTS FOR ADMISSIONS	HOW TO PLAY FOR ADMISSION
Student-at-Large with Bachelor's Degree Students with bachelor's or master's degrees who wish to enroll at Northeastern as non-degree candidates. Students who wish to enter the Graduate College must make formal application to the Graduate College. A maximum of nine credit hours taken in this at-large classification may apply toward a master's degree.	Graduation from an accredited college or university. NOTE: Students who have graduated from Northeastern are eligible to register as students-at-large and need not submit an application.	1. Submit admissions application form. 2. Resident Aliens must submit a photocopy of both sides of their Resident Alien card.
Student-at-Large Without Degree Undergraduate students working toward a baccalaureate degree at another college or university. NOTE: Students-at-large interested in earning an undergraduate degree at Northeastern must submit an application for admission and meet undergraduate admission requirements.	Graduation from an accredited high school or Satisfactory completion of the G.E.D.	Submit application for admission.
Veterans Persons returning from at least one year's active military service will be readmitted or reinstated regardless of previous scholastic record, provided Northeastern Illinois University is the first institution of higher education attended following release from service.		

APPLICATION PROCESSING

Applications are processed continuously throughout the year on a first-come, first-serve basis. Applicants who send all required credentials well in advance of the term for which admission is being sought benefit by receiving earlier notification of admissions decisions.

International students who carry F or J visas must complete their files at least two months prior to the beginning of classes in order to ensure proper processing of the I-20 form.

All transcripts and other documents submitted in support of a student's application for admission become the property of the university. The Admissions Office will retain these credentials for a period of one year from the time of initial application. At the close of this period, all such documents submitted by applicants who do not enroll at Northeastern, will be destroyed.

The discovery of omitted previous postsecondary attendance will be cause for dismissal. The student will not be allowed to complete the term when such a discovery is made; neither will any credit earned at Northeastern be released. An

administrative hold will be put on the student's record. Petitions to reenter will be reviewed by the Admissions Committee after a period of no less than one term has elapsed.

Transcripts which are hand carried by students in sealed envelopes will be accepted by the Admissions Office as "unofficial" documents. If within three weeks after the beginning of the term of admission an "official" transcript is not received directly from the other institution further registration will not be permitted.

ADMISSION THROUGH PETITION

Undergraduate applicants who do not meet stated admission criteria may petition the Committee on Admissions in writing. Recommendation letters from counselors may be submitted in support of the student's application. Each applicant's record will be reviewed on an individual basis.

TRANSFER OF COLLEGE CREDIT

In general, Northeastern will accept, on an hour-for-hour semester-equivalent basis, credit shown on official transcripts

from other accredited institutions according to the following guidelines:

1. For admission purposes only, **all** college level course work at post-secondary institutions previously attended will be considered in the calculation of grade point average. Repeated courses are accepted only once in transfer. In the case where a repeated course is one which the student failed initially, the "F" grade will not be counted in the grade point average. This will apply to one "F" grade per course repeated. Any conflict in identifying repeated courses will be settled by contacting the appropriate academic department if the credentials analyst is unable to determine the matter in question.
2. Courses from unaccredited or nonaccredited postsecondary institutions are **nontransferable**. The reference source used to determine whether an institution meets Northeastern Illinois University's accreditation standards is *The Official Roster of the Association*, published by the North Central Association.
3. Transfer credit in technical and vocational areas will be accepted if the course work is academic in nature and is designed to transfer into a baccalaureate program at Northeastern. In general, technical and vocational courses are acceptable if comparable programs or areas of study are offered at this university.
4. Courses from other colleges or universities must have been completed at the appropriate level to be eligible for transfer credit consideration. Developmental and remedial type courses are examples of courses **not** transferable.
5. "Credit by examination" listed on transcripts must be stated in terms of **Credits Awarded** to be accepted by Northeastern in transfer.
6. Credit for prior learning will **not** be accepted for transfer credit into Northeastern's traditional programs nor will prior learning credit be counted when students change from non-traditional to traditional programs of study while at Northeastern.
7. Credit earned at institutions not accredited but approved for candidacy status by the recognized regional accrediting agencies will be accepted by Northeastern on a conditional basis; viz, course work will be evaluated and recorded on a student's Northeastern academic record following the completion of 30 semester hours of work at Northeastern with a minimum grade average of "C".
8. Science and education courses which are 15 years old or more are not transferable to this university without special departmental approval.
9. A maximum of 30 credit hours of ROTC/Military Science course work is acceptable as elective transfer credit subject to the credit being properly recorded on the student's transcript.
10. Any transfer student from an accredited senior college/university must earn a **minimum** the last 30 hours of

course work **in residence** at Northeastern to be eligible to graduate.

11. Community College work only: All applicable courses taken at a community college are reflected on the Evaluation of Credit form. However, credit hours beyond 60 will not be counted toward graduation.

Senior College work only: All applicable courses taken at a senior institution are reflected on the Evaluation of Credit form. However, credit hours beyond 90 will not be counted toward graduation. Students must earn the last 30 consecutive hours at Northeastern in order to meet graduation residency requirements.

Community College followed by Senior College: All applicable courses taken at a community college and senior institutions are reflected on the Evaluation of Credit form. However, a maximum of 60 community college credits and an additional 30 senior college credits (maximum total of 90 credits) are counted as credit hours leading to graduation. Students must earn their last 30 hours at Northeastern in order to meet graduation residency requirements.

Senior College followed by Community College: All applicable courses taken at community college and senior institutions are reflected on the Evaluation of Credit form. All applicable courses from senior institutions are acceptable toward graduation. However, community college courses taken after a total of 60 credit hours have been earned from **all** colleges/universities will not be counted toward hours earned leading to graduation.

An evaluation of transfer credits is prepared by the Admissions Office for all transfer students admitted to Northeastern. This evaluation statement should be presented to the student's departmental advisor at the time the student declares his major (see below). Courses accepted by the University in transfer do not necessarily meet specific program requirements.

Grades of "D" are accepted in transfer but may only be counted toward meeting General Education or elective requirements. In general, grades of "D" will not be accepted in a student's major, minor or professional sequence.

Course work transferred for credit in the student's major is subject to departmental approval. All transfer credit in Education courses must be approved by the College of Education.

Students attending Community Colleges should check with their Community College counselors to select appropriate courses for transfer to Northeastern.

CREDIT FOR MILITARY SERVICE

Three credit hours are awarded to veterans who have been honorably discharged and have served a minimum of one year on active duty. Veterans must submit a copy of their DD214 to the Admissions Office at the time of application for admission.

Credit is also allowed for those United States Armed Forces Institute (USAFI) courses for which the American Council on Education recommends credit at the baccalaureate level, provided the student has passed the appropriate USAFI end-of-course test or exam.

Credit for service schools successfully completed may be evaluated upon request. The student must file the Request for Evaluation form available at the Admissions/Records counter.

No college credit is awarded for the college-level General Educational Development (G.E.D.) Test.

ROTC PROGRAMS

Air Force ROTC

Students may enroll in the Air Force ROTC program at the Illinois Institute of Technology (IIT). The four-year and two-year programs allow qualified men and women the opportunity to earn commissions as Second Lieutenants in the U.S. Air Force upon graduation and completion of Air Force ROTC. Federal scholarships are available to qualified students of either program and pay full tuition and fees, \$228 a year towards textbooks, and \$100 monthly subsistence allowance. State of Illinois ROTC scholarships are also available to qualified students and pay full tuition. All members of the Professional Officer Course also receive the \$100 monthly subsistence allowance. The Air Force ROTC courses are taught on the IIT campus. For more information on Air Force ROTC, call (312) 567-3535/3526 or stop by 3201 S. Michigan (IIT Military Science Building) in Chicago.

Army ROTC

Northeastern students may participate in Army Reserve Officers' Training Corps in conjunction with Loyola University of Chicago. The Reserve Officers' Training Corps prepares students for service as Army Officers. Additionally, it provides invaluable leadership and managerial instruction which can be applied to any occupation. Successful completion of the program results in a commission as a Second Lieutenant in the Regular Army, Army National Guard or Army Reserve. During the first two years, (Basic Course), the fundamentals of military organization and leadership are taught, and students have a chance to see what the program entails. Students enrolled in the Advanced Program during the junior and senior years are paid \$100 per month. There are special two-year programs available for academic juniors, graduate students, Veterans and members of the Army Reserve components. Any qualified Northeastern student can apply for an Illinois State Scholarship (ROTC tuition waiver). Up to ten of these scholarships are available per school year. Basic Course ROTC students who receive one of these scholarships incur absolutely **no** military obligation. All ROTC courses may be considered part of a department's curriculum. For further information contact: Loyola Army ROTC (312) 508-2695.

CREDIT FOR ADVANCED PLACEMENT

Credit for advanced placement may be granted to students who have participated in the College Entrance Examination Board "Advanced Placement Program" in their high schools. Students who intend to enter the university under this program should arrange to have their advanced placement examination records sent to the director of admissions and records.

CREDIT THROUGH COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Credit for successful performance on the general examination may be granted to students who have participated in the College Level Examination Program. Credit is awarded for scores earned at the fiftieth percentile or higher. A maximum of 30 hours of lower division credit may be awarded through CLEP. CLEP credit is not accepted as credit toward graduation when a student has completed 60 hours of course work.

ADMISSION TO MAJOR PROGRAMS

Undergraduate applicants are first approved for admission to the university. It is then the student's responsibility to make application to the academic department where he/she wishes to major, and to the College of Education if pursuing a teacher education program.

RESIDENCY STATUS

For the purpose of this regulation an "adult" is considered to be a student eighteen years of age or over; a "minor" student is a student under eighteen years of age. The term "the state" means the state of Illinois. Except for those exceptions clearly indicated in this regulation, in all cases where records establish that the person does not meet the requirements for resident status as defined in this regulation the nonresident status shall be assigned.

1. Residency Determination

Evidence for determination of residence status of each applicant for admission to the university shall be submitted to the office responsible for admissions at the time of application for admission. A student may be reclassified at any time by the university upon the basis of additional or changed information. However, if the student is classified in error as a resident student, the change in tuition shall be applicable beginning with the term following the reclassification; if the student is classified in error as a nonresident, the change in tuition shall be applicable to the term in which the reclassification occurs, provided the student has filed a written request for a review in accordance with this regulation.

2. Adult Student

An adult, to be considered a resident, must have been a bona fide resident of the state for a period of at least six

consecutive months immediately preceding the beginning of any term for which he/she registers at the university, and must continue to maintain a bona fide residency in the state, except that an adult student whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the state and who resides with them (or the one residing in the state) or elsewhere in the state will be regarded as a resident student.

3. Minor Student

The residence of a minor shall be considered to be, and to change with and follow:

- a. That of the person's parents, if they are living together, or living parent, if one is dead; or
- b. if the parents are separated or divorced, that of the parent to whom the custody of the person has been awarded by court decree or order, or, in the absence of a court decree or order, that of the father unless the person has continuously resided with the mother for a period of at least six consecutive months immediately preceding his/her registration at the university, in which latter event the person's residence shall be considered to be that of his/her mother; or
- c. That of the adoptive parents, if the person has been legally adopted and, in the event the adoptive parents become divorced or separated, that of the adoptive parent whose residence would govern under the foregoing rules if that parent had been a natural parent; or
- d. that of the legally appointed guardian of the person if the minor resides with such guardian; or
- e. that of a "natural" guardian, such as a grandparent, adult brother or adult sister, adult uncle or aunt, or other adult with whom the person has resided and has been supported by for a period of at least six consecutive months immediately preceding his/her registration at the university for any term if the person's parents are dead or have abandoned him/her and if no legal guardian of the person has been appointed and qualified.

4. Parent or Guardian

Except as provided in paragraph 10 of this regulation, no parent or legal or natural guardian will be considered a resident of the state unless the parent or guardian (a) maintains a bona fide and permanent place of abode within the state, and (b) lives within the state, except when temporarily absent from the state, with no intention of changing his/her legal residence to some other state or country.

5. Emancipated Minor

If a minor has been emancipated, is completely self-supporting, and actually resides in the state, the minor shall be considered to be a resident even though his/her parent or guardian may reside outside the state. An emancipated minor who is

completely self-supporting shall be considered to "actually reside in the state of Illinois" if he/she maintained a dwelling place within the state uninterrupted for a period of at least twelve consecutive months immediately preceding the beginning of any term for which he/she registers at the university. Marriage or active military service shall be regarded as effecting the emancipation of minors, whether male or female, for the purposes of this regulation. An emancipated minor whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the state and who resides with them (or the one residing in the state) or elsewhere in the state will be regarded as a resident student.

6. Marriage of Students

- a. If a resident student marries a nonresident, then the resident student shall continue to be classified as a resident unless the student requests reclassification to a nonresident status.
- b. If a nonresident student marries a resident, then the nonresident student shall continue to be classified as a nonresident unless the student executes a declaration of residency, in such form as may be prescribed by the office responsible for admissions and requests reclassification to resident status.

7. Persons Without United States Citizenship

A person who is not a citizen of the United States of America, to be considered a resident must have permanent resident status with the United States Immigration and Naturalization Service or a visa that allows applicant to stay in the United States indefinitely. They must also meet and comply with all of the other applicable requirements to establish resident status.

8. Armed Forces Personnel

A person who is actively serving in one of the Armed Forces of the United States and who is stationed and present in the state in connection with that service and submits evidence of such service and station, as well as such person's spouse and dependent children, shall receive a waiver of the nonresident portion of tuition as long as such person remains stationed and present in Illinois and the spouse or dependent children of such person also live in the state. If such a person is transferred to a post outside the continental United States, but such person or the spouse and/or dependents of such person remain(s) registered at the university then such a waiver shall continue until such time as the person in service is stationed in another state within the continental United States.

9. Minor Children of Parents Transferred Outside the United States

The minor children of persons who have resided in the state

for at least twelve consecutive months immediately prior to a transfer by their employers to some location outside the United States shall be considered residents. However, this shall apply only when the minor children of such parents enroll in the university within five years from the time their parents are transferred by their employer to some location outside the United States.

10. Staff Members of the University, Allied Agencies, and Faculties of State-Supported Institutions in Illinois

Staff members of the university and of allied agencies, and faculties of state-supported institutions of higher education in Illinois, holding appointment of at least one-quarter time, and their spouses and dependent children, shall be treated as residents.

11. Teachers in Public and Private Illinois Schools

Teachers in the private and public elementary and secondary schools in Illinois shall, if subject to the payment of tuition, be assessed at the resident rate during the term in which the staff member or teacher holds such an appointment at least one-quarter time. This privilege also extends to the summer session or off-term vacation immediately following the term for which such appointment was effective.

12. Definition of Terminology

To the extent that the terms "bona fide residence," "independent," "dependent," and "emancipation," are not defined in this regulation, definitions shall be determined by according due consideration to all of the facts pertinent and material to the question and to the applicable laws and court decisions of the state of Illinois.

Voter registration, filing of tax returns, proper license and registration for the driving or ownership of a vehicle, and other such transactions may verify intent of residence in a state. Neither length of university attendance nor continued presence in the university community during vacation period shall be constructed to be proof of Illinois residence.

The term "staff member" as used in this regulation shall mean a person appointed to an established position for specific amount of time at a salary commensurate with the percentage of time required, under an appointment requiring service for not less than three-fourths of the term. The term "staff member" as defined herein shall not apply to persons employed on an hourly basis in either an academic or non-academic capacity, nor to persons on leave without pay. Persons appointed to established civil service positions, whose rate of pay is determined by negotiation or prevailing rates, shall not be considered as being paid on an hourly basis.

13. Procedure for Review of Residency Status

A student who takes exception to the residency status assigned and/or tuition assessed shall pay the tuition assessed but

may file a claim in writing to the director of Admissions and Records for a reconsideration of residency status and/or an adjustment of the tuition assessed. The written claim must be filed within 30 calendar days from the date of assessment of tuition or the date designated in the official university calendar as that upon which instruction begins for the academic period for which the tuition is payable, whichever is later, or the student loses all rights to a change of status and/or adjustment of the tuition assessed for the term in question. If the student is dissatisfied with the ruling in response to the written claim made within said period, the student may appeal the ruling by filing a written appeal with the office responsible for admissions within 20 days of receipt of notice of ruling. Such written appeal shall be forwarded by the office responsible for admissions to board legal counsel, who shall consider all evidence submitted in connection with the case and render a decision which shall be final.

STATEMENT OF FEES

Mandatory tuition and fees are detailed in the Schedule of Classes for the current term, and are subject to change without notice.

REFUNDS

Final dates for refunds upon complete withdrawal from all classes will be stated in the Schedule of Classes. A service charge will be deducted for processing refunds.

Health insurance and parking fees are not refundable.

TRANSCRIPT FEE

Students will be assessed a transcript fee during their first term of enrollment to support the production of transcripts upon request, up to a reasonable limit per student.

MANDATORY STUDENT FEES

Students registered at Northeastern Illinois University pay a variety of fees intended to enhance and facilitate many aspects of campus life.

An Athletic Fee finances a wide variety of intercollegiate athletic programs.

The Commuter Center Fee helps support the Commuter Center Student Union which is the heart of the activity program on campus. It is the scene of lectures, discussions, concerts, dances, meetings, and other activities. Its facilities include food services, the campus bookstore, lounges, meeting rooms, game room, offices for student government, media and the student activities office.

The Student Activity Fee is used to support the Student Government, student organizations and clubs, and the many activities, programs, media, and events sponsored by the above group.

The Performing Arts Fee helps to support university theatre and dance productions and musical concerts.

The Recreational/Intramural Fee supports the Recreation Intramural Program, which is a full schedule of recreational opportunities and also pays for salaries of individuals to manage the facilities.

Student-Health Insurance Fee—All full-time undergraduate students will automatically be covered unless they have an insurance plan equal or better than the Northeastern student plan. If they have such coverage, a waiver card can be submitted at the time of validation and the fee will be deducted.

PAYMENT OF THESE FEES IS REQUIRED BY THE BOARD OF GOVERNORS.

POLICY ON RELEASE OF INFORMATION PERTAINING TO STUDENTS

In compliance with the Family Educational Rights and Privacy Act of 1974, as amended, the following policy outlines the procedures available for access to student records. This policy is intended to ensure the confidentiality of student records.

I. Definitions

A. "Student" is defined as one who has attended or is attending Northeastern Illinois University and whose records are in the files of the University.

B. "Education records" are those records which are directly related to a student and maintained by the institution or by a party acting for the institution. "Education records" do **not** include files made by and kept in the sole possession of the maker which are not accessible to any other person.

C. "Directory information" includes name, address, dates of attendance, enrollment status, class, previous institutions attended, major field of study, awards, honors, degrees conferred with dates, past and present participation in officially recognized sports and activities, physical factors (height and weight of athletes), and date and place of birth. (See Section V, Release of Information).

II. Location of Education Records

All students have records in the Admission/Records Office, D-111, maintained by the Director of Admissions/Records.

Students may also have records in the following offices which are maintained by the administrative officer listed:

Academic Development	4-026	Dean
*Center for Individualized Studies	C-330	Director
Dean of Students	B-114	Dean
*College of Arts and Sciences	S-158A	Dean
*College of Education	4-044	Dean
*College of Business and Management	0-041	Dean

Financial Aid	D-201	Director
Graduate College	4-027	Dean
Special Programs	4-026	Dean
Vice-President for Student Affairs	B-104	Vice-President

* Some departments maintain records separate from the College. A list of departments or programs which have separate records, their location, and the person responsible for the record may be obtained from the office of the Dean of the College in which the department or program is located.

III. Availability of Records to Students

A student's record is open to the student, with the following exceptions:

A. Letters of recommendation placed in files prior to January 1, 1975 which were intended to be confidential and used only for the purpose for which they were prepared.

B. Records of parents' financial status.

C. Medical and psychological records. Medical and psychological records are not available to anyone other than those providing treatment, but can be reviewed by a physician or licensed professional of the student-patient's choice.

D. Some items of academic record under certain conditions. To ensure the validity and confidentiality of references prepared off campus and on campus, certain documents may carry waivers, signed by the student, relinquishing the student's right of access to the document.

Waivers are subject to the following conditions:

1. Waivers can be signed only for the specific purposes of application for admission, candidacy for honor or honorary recognition, including financial aid, based at least in part on merit, and candidacy for employment;

2. Waivers cannot be required;

3. The student shall be told, upon request, the names of those supplying references.

All items in the academic record not covered by waivers are open to the student. Material not covered by waivers may not be protected by keeping it out of the student's file.

IV. Availability of Records to University Personnel

Student records are open to members of the currently employed University faculty and staff who have a legitimate need to know their contents, with the following provisions/restrictions:

A. The determination of a "legitimate need to know" will be made by the person responsible for the maintenance of the record. This determination must be made scrupulously and with respect for the individual whose record is involved. Circumstances such as the direct student relationship to the person seeking the records (such as a professor accessing the records of an enrolled student in his or her class) must be determined prior to access.

B. Those letters and statements in an education record which are inaccessible to students (filed before January 1, 1975, or segregated by waivers) are to be used only for the purpose for which they were prepared.

V. Release of Information to Third Parties

A. Directory information may be released to public officials; it may also be released to agencies or persons outside the university for purposes of acknowledging awards, honors, and achievements earned by students, unless the student requests, in writing, that this information be withheld. Such written request must be filed with the Admissions/ Records office within the dates announced.

B. Other information in the education record normally will be released to third parties (i.e., anyone not a member of the faculty or staff) *only* at the written request of the student. A student may secure from the appropriate office a "consent form" authorizing the release of specified records to specific individuals.

C. Other information in the education record will be released to third parties without the consent of the student only as follows:

1. Education records will be released to third parties only by the Vice President for Student Affairs, the Director of Financial Aid, or the Director of Admissions and Records. No other University office will release education record information to third parties directly except in the case of institutional audits. Third party requests to other University offices shall be referred to one of the aforementioned officials.

2. The third party must submit the request in writing and must specify legitimate reason. A copy shall be filed with the President's coordinator of legal affairs.

3. Information will be released:

a. To Federal and State Officers in connection with the audit and evaluation of federally supported educational programs and to enforce federal laws;

b. As required by State law;

c. To research projects on behalf of educational agencies seeking test norms, improving instruction, etc., provided that there is no personal identification of students;

d. To accrediting agencies carrying out their functions;

e. In response to a subpoena;

f. To persons in an emergency if the knowledge of information is in fact necessary to protect the health or safety of the student or other persons.

4. A reasonable attempt will be made to notify the student prior to the release of information if: (a) the request for information takes the form of a subpoena, and (b) disclosure without notice would infringe upon the student's rights under the Family Educational Rights and Privacy Act. Judgments

on condition (b) will be made by the President's coordinator of legal affairs in consultation with the university President and the BOG staff attorney.

5. A notation of the release made to third parties will be kept in the student's record by the Vice President for Student Affairs, the Director of Financial Aid, or the Director of Admissions and Records except when the reason for the request is institutional audit, procedural evaluation, or research. Reasons shall be evaluated in consultation with the President's coordinator of legal affairs. Such notation is open only to the student and the person in charge of the record.

D. The third party is prohibited by the Family Educational Rights and Privacy Act from subsequently releasing personally identifiable information to other (or fourth) parties, and shall be so informed in writing by the university official who releases information.

VI. Access Procedure

The university has established the following procedures enabling the student to have access to his or her record within forty-five days of the request and has provided for interpretation and challenge.

A. The student may see his or her file by filling out a specific request form at the office where the record of interest is maintained.

B. Access is to be granted promptly and no later than 45 days from the date of request.

C. The student may make the request in person or by mail.

D. The student may obtain copies of records upon request (for which the university may charge an appropriate fee per page).

E. The student may request and receive interpretation of his or her record from the person (or designate) responsible for the maintenance of the record.

VII. Review on Challenge

A. In the event a student challenges the content of the education record on the basis that an item(s) is inaccurate, misleading, or violates the privacy or other rights of the student, the custodian of the education record shall discuss the challenge with the student and attempt to resolve the challenge within a framework of maintaining the integrity, accuracy, and usefulness of the record. If the student wishes to insert a written explanation regarding the content of the record, such written explanation is to be accepted and included in the record.

B. If the custodian and student are unable to resolve the challenge, they shall schedule a meeting with the appropriate dean, within 15 days of the challenge for further review.

C. If no resolution can be effected, the matter will be referred to the appropriate vice-president's hearing panel.

D. It is the obligation of the university to amend the education record if it is found that information contained therein is inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, and the student's statement commenting on the education records which may be inserted therein shall be maintained as part of the educational records and shall be disclosed, together with the contested portion, to any party entitled to receive the education records.

VIII. The Hearing

A. General principles:

A request for a hearing must be specific to a record, be submitted in writing to the custodian of the record, and include an explanation or justification of the request for a hearing. It is the responsibility of the student to prepare the written request.

B. The hearing panel shall be appointed by the appropriate vice-president. It shall consist of:

1. At least one administration official of the university who does not have an interest in the direct outcome of the hearing;
2. One faculty member of the university who does not have an interest in the direct outcome of the hearing;
3. Two representatives from the Student Government or appropriate body.

The custodian of the record(s) or his or her designate shall be present as a resource person, but only as an ex-officio member of the panel.

C. The hearing panel process shall afford the student a full and fair opportunity to present evidence relevant to the issue being raised. The process will ensure that:

1. Hearings will be scheduled within a reasonable period of time not to exceed 45 days from the date on which the appeal was heard by the appropriate dean;
2. Hearings will not be open to the public;
3. Neither the student in question, nor his representative, shall serve on the panel;
4. Decisions of the panel will be by majority vote and will be final;
5. Results of the hearing, to include a summary of the evidence and the reasons for such decision, will be communicated in writing to the student and to the custodian(s) of the record being challenged within a period not to exceed 45 days after the conclusion of the hearing.

IX. Notification Regarding Access to Records

Annual notification of this policy shall be made in official publications, such as the school catalog.

X. Continued Maintenance

Nothing in this policy requires the continued maintenance of any student record. However, if under the terms of this policy a student has requested access to the record, no destruction of the record shall be made before access has been granted to the student. Persons in charge of records should ensure that only pertinent items are retained in student files.

REASONABLE ACCOMMODATION OF RELIGIOUS OBSERVANCES

Consistent with Illinois Public Act 84-212, an act to prohibit public school districts and institutions of higher education from discriminating against students for observing religious holidays (effective August 26, 1985), Northeastern Illinois University subscribes to the following policy and procedures:

A. Northeastern Illinois University supports the concept of "Reasonable Accommodations of Religious Observances" in regard to admissions, class attendance and the scheduling of examinations and other academic work requirements.

B. A student who is unable because of the observance of a religious holiday to attend classes on a particular day or days or at a particular time of day shall be excused from any examination or any study or other academic work assignments on such days or times.

C. It is the responsibility of the faculty and administrative personnel to make available to such students an equivalent opportunity to make up the examinations, study or other academic work requirements which they missed due to such absences.

D. It is the responsibility of all students who are employees of the University to make arrangements to fulfill their obligations to the University in advance of their absence, and/or to utilize accrued leave (if applicable) during the absence.

E. No fees or penalties may be imposed against the students who exercise such afforded opportunities.

F. The faculty and administrative personnel may require up to five (5) calendar days advance notice of absences to observe religious holidays.

If a student believes she or he has been a victim of discrimination on grounds of religious observances, she or he may seek redress under the existing Affirmative Action Complaint Procedures (copies available in the Affirmative Action Office and reprinted in the UNI Student Handbook).

POLICY ON DRUG AND ALCOHOL ABUSE

Consistent with its mission as a public institution of higher education, Northeastern Illinois University is committed to educating students, faculty and staff on the dangers of alcohol and drug abuse, and to maintaining a campus environment in which such abuse is prohibited.

Accordingly, the faculty, staff, and students, in their affiliation with the University, shall not manufacture, possess, use, deliver, sell or distribute any substance prohibited by the Illinois Cannabis Control Act, the Illinois Controlled Substance Act, or any other state or federal statute, except as authorized by law, consistent with the regulations of the Board of Governors and the policies of Northeastern Illinois University. Further, faculty, staff, and students may not possess or consume alcoholic beverages on university property or at university-sponsored activities except in accordance with the University's Alcohol Policy.

The University Counseling Office offers counseling and referral services to students who have drug or alcohol abuse related problems. Students who violate University policies concerning drugs and alcohol may be referred for disciplinary action in accordance with the Student Due Process Policy. Students, faculty, and staff who violate state or federal law may also be subject to criminal prosecution.

POLICY ON ORAL PROFICIENCY

Northeastern Illinois University, in accordance with a 1987 State statute, insures that all persons providing classroom instruction to students are proficient in oral English. If an instructor's oral proficiency is in doubt, students should contact the department chair to obtain information about the University's procedure for handling complaints.

POLICY ON SERVICES FOR DISABLED STUDENTS

Northeastern Illinois University complies with Section 504 of the Rehabilitation Act of 1973 which states that "No otherwise qualified handicapped individual in the United States... shall, solely by reason of his (or her) handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance..."

I. The Affirmative Action Office (A.A.O.) assumes responsibility for seeing that the University is properly interpreting Federal regulations requiring that the University take such steps as are necessary to ensure that no disabled student is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination because of the absence of educational auxiliary aids for students with impaired sensory, manual or speaking skills. The Affirmative Action Officer will be responsible for coordinating the University's compliance with these regulations.

In cooperation with the Admissions Office, Health Service, Counseling Office and the Handicapped Educational Liaison Program (HELP), the A.A.O. assumes responsibility for receiving and coordinating inquiries from students regarding auxiliary aids, academic adjustments, or other special needs.

II. The following procedure will apply for consideration of requests for auxiliary aids, academic adjustments, or other

special services. Students should complete the steps listed below sufficiently in advance of the anticipated need for services. Such notice is required in order to give the various academic and service areas a reasonable period of time in which to evaluate requests.

A. Students must be admitted to and/or enrolled in the University.

B. Students requesting auxiliary aids, academic adjustments, or other special services should first contact the University's Handicapped Educational Liaison Program. If the request requires modification of academic procedural requirements or necessitates special testing and/or course evaluation methods, students must provide a written diagnosis from appropriate professional personnel. Such diagnosis is subject to verification by the University. If the request cannot be granted by the Handicapped Educational Liaison Program (HELP), students will be required to contact the local Department of Rehabilitation Services (DORS) office for services.

C. If DORS denies the request for auxiliary aids, academic adjustments, or other special services, the request will be brought to the A.A.O. As a General rule, the Affirmative Action Officer will require students to present proof of denial of funds by DORS before the University will consider requests that require special funding. However, a student may receive consideration of such requests in advance of DORS action if there is a substantial delay on the part of DORS due to no fault of the student.

D. The A.A.O. will make a case-by-case determination of the student's educational need for the requested auxiliary aid, academic adjustments, or other special services. Auxiliary aids, academic adjustments, or other special services determined to be necessary will be provided at no cost to the student.

III. Students who believe that they have been discriminated against on the basis of a disability can seek resolution through the University's Affirmative Action Complaint Procedure. Information and consultation on these procedures are available through the Affirmative Action Office (Room 219, Bldg. C, Ext. 3375).

GENERAL EDUCATION PROGRAM

The baccalaureate program at Northeastern Illinois University is designed to provide students with depth in their chosen field through the requirements in the major and to familiarize them with a broad range of disciplines and methods they use through the General Education Program. Completion of the Program provides students with knowledge that will be helpful to them in many aspects of their professional and personal life by broadening their horizons, sharpening their thinking, communication, and research skills, and lays the foundation for further lifelong learning.

The specific goals of the general education requirements include developing knowledge of or competence in the following areas:

1. communication and computation;
2. gathering, analyzing, documenting, and integrating information;
3. historical processes and cultural differences;
4. aesthetic and literary sensitivity;
5. the modes of thought, the concerns, and the methodologies of the fine arts, the humanities, the behavioral and social sciences, and the natural sciences;
6. use of quantitative methods in the natural, social, and behavioral sciences.

The General Education Program requirement consists of 42 credit hours of courses specified on the Limited List of Courses* distributed among five areas as follows:

Fine Arts 2 courses, 6 cr.
(Art, Music, Speech and Performing Arts)

Humanities 3 courses, 9 cr.
(English, Foreign Languages and Literatures, Linguistics, Philosophy)

Behavioral/Social Sciences 4 courses, 12 cr.
(Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology)

Natural Sciences 4 courses, 12 cr.
One course must have a laboratory component.
(Biology, Chemistry, Earth Science, Mathematics, Physics)

Interdisciplinary/Professional Studies one course, 3 cr.
(Criminal Justice, Environmental Studies, Computer Science, International/Intercultural Studies, Program for Interdisciplinary Education, Social Science, Social Work, Women's Studies, all departments and units in the College of Business and Management, all departments and units in the College of Education.)

* Only courses included on the Limited List of Courses

during the term of enrollment (published in the Schedule of Classes) are applicable towards the general education requirements with the following exceptions:

1. Students majoring in Art, Music, or Speech and Performing Arts have thereby fulfilled the general education requirements in the area of Fine Arts.
2. Students majoring in English, Foreign Languages and Literatures, Linguistics, or Philosophy are required to take only one course, 3 credit hours, in the area of the Humanities. This course may not be offered by the department of the student's major.
3. Students majoring in Anthropology, Economics, Geography, History, Political Science, Psychology, or Sociology are required to take only two courses, 6 credit hours, in the area of Behavioral/Social Sciences. These courses may not be offered by the department of the student's major.
4. Students majoring in Biology, Chemistry, Earth Science, Mathematics, or Physics are required to take only two courses, 6 credit hours, in the area of Natural Sciences. These courses may not be offered by the department of the student's major. Mathematics majors must include a course with a laboratory component.
5. Students majoring in Criminal Justice, Environmental Studies, Computer Science, Social Science, Social Work, one of the departments in the College of Business and management, or one of the departments in the College of Education have thereby fulfilled the general education requirement in the area of Interdisciplinary/Professional Studies.

No more than two courses from any one department
(including courses transferred to Northeastern Illinois University) with the exception of Mathematics, where only one course applies, may be selected in meeting the general education requirements.

AREA OF STUDY IN ADDITION TO THE MAJOR

All undergraduate students are required to have an area of study in addition to their major.

A student in the College of Arts and Sciences who majors in Biology, Chemistry, Earth Science, or Physics satisfies the requirement by means of a required group of cognate courses in other sciences and mathematics.

A student who completes a major in the College of Business and Management satisfies the requirement by means of completing cognate courses in the Business and Management core in addition to courses for the major.

A student who completes a professional education sequence in the College of Education has thereby satisfied the requirement.

Other students satisfy the requirement by completing a second major or a minor. Requirements for majors and minors are listed in detail in the academic department entries which follow.

Students who have specific questions should contact either their faculty academic advisor or the Coordinator of the General Education Program.

GRADUATION REQUIREMENT OF COMPETENCE IN ENGLISH

All undergraduate students must pass the English Competence Exam in order to graduate from Northeastern Illinois University. Students must take the exam before completing 60 hours toward graduation and must have passed it upon completion of 90 hours.

DIAGNOSTIC EXAMINATIONS Incoming Freshmen

All incoming freshmen must take diagnostic examinations (placement tests) in the English language and in mathematics either before their first registration or during their first term at Northeastern Illinois University. Students must enroll in the recommended courses and should continue the recommended sequence of courses until they either complete ENGL-101 or demonstrate competence.

No student may register for an English Language Program, English Writing, Developmental Reading or Mathematics course before taking the appropriate examination.

Incoming freshmen will **not** be permitted to register for a third term of attendance at Northeastern Illinois University unless they have taken both placement tests.

Incoming Transfer Students and Readmitted Students

All incoming transfer students and readmitted students must take the English Competence Exam either before their first registration or during their first term at Northeastern. Readmitted students who have passed the English Competence Exam before they interrupted their studies have met this requirement. Students who pass the exam have met the graduation requirement of competence in English (see above). Students who fail the exam are placed in the appropriate English Language Program, English, or Reading course(s), or recommended to work in the ELP and/or Reading Laboratories. Students must enroll in the recommended sequence of courses and continue until they demonstrate competence.

Students who wish to take Mathematics courses and who have not yet completed a calculus course must take the Mathematics Placement Test.

No student may register for an English Language Program, English Writing, Developmental Reading or Mathematics course before taking the appropriate examination.

Incoming transfer students and readmitted students will **not** be permitted to register for a third term of attendance at Northeastern Illinois University unless they have met this requirement.

ACADEMIC REGULATIONS

THE ACADEMIC YEAR

The academic year 1990-91 consists of the Fall Semester, August 28 to December 22, 1990, the Spring Semester, January 10 to May 10, 1991, and a twelve week (May 28 to August 16, 1991) and eight week (July 1 to August 23, 1991) terms. Within the twelve week term, a five week session of intensive study is available.

CLASS ATTENDANCE

Students are expected to attend all regularly scheduled classes and examinations. If a student has more than three unexcused absences (or one per class credit hour), the instructor may lower the student's grade, require additional work, and/or impose other sanctions as appropriate. Additional class attendance provisions may be adopted by the separate academic departments.

Department instructors may assign a grade of "R" to any student registered for a class who does not attend the first class session, is late for the first class session, or neglects to inform the instructor in advance of the intended absence. The student's seat in the class may also be reassigned by the instructor. The student will be responsible for any financial consequence if the course is not dropped officially by the student before the appropriate refund deadline.

ACADEMIC CONDUCT

Northeastern Illinois University students are expected to exhibit the highest standards of academic integrity. Academic misconduct such as plagiarism or cheating is unacceptable and will be investigated in accordance with University policy on academic misconduct. (See Student Handbook)

UNIT OF CREDIT

Credits at Northeastern are measured in semester hours. One semester hour consists of the equivalent of one 50 minute lecture or discussion period, or two laboratory periods per week, for one term. For individual study programs, requirements for a credit unit are arranged on an individual basis.

COURSE NUMBERS

A general guideline to the course numbering system is:

- 090-level courses are developmental; credit does not apply towards graduation;
- 100-level courses are taken during the freshmen year;
- 200-level courses are generally taken by sophomores;
- 300-level courses are for advanced undergraduates and, under some conditions, graduate students;
- 400-level and 500-level courses are for graduate students **ONLY**.

STUDENT CLASSIFICATION

	Total	Hours Earned:
Freshman	00 - 29	hours
Sophomore	30 - 59	hours
Junior	60 - 89	hours
Senior	90 +	hours

Graduate Student — admitted to a graduate degree program
Student-at-Large — not admitted to a degree program

COURSE LOAD

Overloads require (1) the appropriate cumulative GPA, (2) starting with the student's fourth term of enrollment, passing the English Competency Exam, (3) the signature of the advisor, and (4) the signature of the appropriate dean (for undergraduates, the dean in whose college the major department is located, or, before declaration of a major, the dean of the College of Arts and Sciences; for graduate degree students, the dean of the Graduate College).
See the current schedule of classes for more information.

NOTE: No student may carry a course overload during the first term at Northeastern.

When verifying enrollment for purposes of loan deferment, Social Security eligibility, veteran's benefits, etc., the university reports full-time/part-time status in the following manner:

Enrolled Semester Hours	(Fall and Spring Semesters)
Graduate	Undergraduate
9 or more = full-time	12 or more = full-time
4 to 8 - ½ time	6 to 11 - ½ time
3 = part time	5 = part time

NOTE: Enrollment verification for Second Bachelor Degree students will be based on undergraduate criteria as stated above.

REPEATED COURSES

If a student elects to repeat a course, both grades and their corresponding grade points are used to calculate the grade point average. However, a repeated course cannot be used towards fulfilling the minimum 120 hours graduation requirement. In addition, if a student repeats a course for which he received similar transfer credit, only one of the courses will be credited towards graduation.

This policy does not apply to independent studies, individual titles of varying courses, or courses specifically identified in the catalog with the description "may be repeated for credit".

GRADING SYSTEM

Effective with the Fall 1990 semester Northeastern is on a 4.0 grading scale, i.e., each credit hour of "A" equals 4 grade

points; an "A" earned in a 3 credit hour course generates 12 grade points.

The student's grade point average (GPA) is calculated by: total number of grade points earned divided by total number of credit hours earned. Transfer hours and courses in which a "P" grade is earned are not used to calculate the grade point average.

A general guide to the grades awarded follows:

Grade	Grade Points Per Credit Hour
A	4
B	3
C	2
D	1
F	0
I	0
P	0
R	0

V	Visitor/Auditor — Enrollment for no credit, no grade; not convertible to letter grade, nor applicable toward graduation credits.	0
W	Withdrawal — Student withdraws after the change-of-registration period, through the last day to officially withdraw.	0
X	Symbol used to indicate grades were not submitted by instructor in time for processing. NOT AN ACADEMIC GRADE. Replaced later by the academic grade earned.	0

POLICY ON INCOMPLETES

"I" (incomplete) may be given if a student is absent from the final examination or fails to complete a special research or individual study project because of some unavoidable circumstance such as illness.

Incompletes assigned prior to September 1979 will be retained until such time as the instructor assigns a regular grade with the exception that "I" grades earned prior to the recording of a degree cannot be removed after the degree has been awarded.

Incompletes assigned between Fall 1979 and Spring 1984 that have not been changed to a regular letter grade are permanent. This rule does not apply to thesis seminars or master's project seminars.

Effective Spring/Summer 1984, "I" grades may only be assigned after an Incomplete Removal Contract Form has been completed with the instructor detailing the steps necessary for removal of the incomplete.

Incompletes that have not been removed within the one year period, as explained above, will become permanent if the student was performing satisfactory work (A, B or C) at the time the "I" grade was issued. "I" grades for students who were not performing satisfactory (D or F) work will be changed to an "F" grade.

This policy does not apply to thesis seminars or master's project seminars.

GRADE CHANGE LIMITATION

Effective Fall 1981, there is a time limit of one calendar year for any changes in letter grades. Grades assigned prior to the recording of a degree cannot be changed after the degree has been awarded.

PERMANENT PASS/FAIL OPTION

1. The Pass/Fail Option is available only to **undergraduate** students in good standing.
2. Students are eligible to exercise the Pass/Fail Option only after accumulating 15 hours in residency (courses taken at Northeastern).

3. Eligible students will be permitted only one Pass/Fail course per term. A maximum of 18 Pass/Fail hours, including P.I.E. courses and transfer courses from other institutions, may be applied toward graduation. Courses taken Pass/Fail may not be counted toward a student's major or minor area of concentration.

4. Declaration of the intention to select Pass/Fail Option must be made during the on-campus registration, change of registration activities, or no later than the third day after the official change of registration date published in the term schedule of classes. The decision to select the Pass/Fail Option may not be changed after that date.

5. A grade of "P" will be used to indicate that the student has passed the course and a grade of "F" that he/she failed the course. This "F" grade is included in the calculation of the grade point average.

6. Pass/Fail grading is not allowed for Tutored Study or Independent Study.

7. Instructors may offer courses restricted to Pass/Fail registration with approval from the appropriate College Academic Affairs Committee or its equivalent, and by the Faculty Council on Academic Affairs or its equivalent, either at the time of initial course approval or subsequently. Hours of credit carried by such a course(s) will be part of the maximum of 18 hours which have been approved for the general Pass/Fail Option.

VISITOR/AUDITOR

A student who wishes to audit courses must obtain the written permission of the instructor, register in the regular manner, and pay all fees charged students earning credit in the same course. The audit option can only be selected at the time of registration. Once the student has enrolled as an auditor in a course, he/she may not change registration to earn credit.

ACADEMIC STANDARDS, PROBATION AND DISMISSAL

Undergraduates

The minimum cumulative grade point average which must be maintained in order to be classified as an undergraduate student in good standing is 2.0 (on a 4.0 scale) or a "C" average. Students must have at least a 2.0 cumulative average in order to graduate. The cumulative grade point average is computed on the basis of credit earned at Northeastern Illinois University only (A=4, B=3, C=2, D=1, F=0).

An undergraduate student will be placed on academic probation when his/her cumulative grade point average falls below 2.0 (C). If, in subsequent terms, the student earns grades which restore his/her cumulative average to 2.0 or above, he/she will be returned to good standing. If, in subsequent terms, the student earns at least a 2.0 average for the term, but does not restore his/her cumulative record to 2.0, he/she

will be permitted to continue on academic probation. If, in any subsequent term, the student on probation fails to earn a 2.0 average for the term, he/she will be dropped from the university for poor scholarship. Students who have been placed on academic probation are required to carry a minimum course load necessary to continue normal and successful progress to raise their grade point average.

A student who has been dropped for poor scholarship may appeal to the Academic Standards Committee for reinstatement after one term. If the appeal is granted, the reinstated student will be on probation and will be subject to the standards for a student on probation as detailed in the preceding paragraph. (Should a student be dropped for poor scholarship a second time, he/she will ordinarily be ineligible for readmission to the university.)

All petitions to the Academic Standards Committee must be submitted no later than **July 15, November 15, or March 15** in order to be considered for reinstatement the next term in residence.

The Academic Standards Committee is responsible for all policies governing the probation, dismissal and reinstatement of undergraduate students, and will recommend action to the Provost. Decisions of the Provost shall be final in all cases.

Students-at-Large

Students-at-large with bachelor's degrees and undergraduate students-at-large will be dropped for poor scholarship if, upon completion of four courses, they have less than a 2.0 (on a 4.0 scale) (C) cumulative grade point average, and have not maintained a term grade point average of 2.0 or better.

A student-at-large who has been dropped for poor scholarship may appeal to the Academic Standards Committee for reinstatement after one term.

Graduate Students

To remain in good academic standing, graduate students in a Master's Program must make satisfactory progress toward their degree. Graduate students who have less than a 2.0 ("C" average) after completing 4 or more courses at Northeastern and who have not maintained a term GPA of 2.0 or better will be dropped from the university. See detailed academic regulations in the Graduate College section of this catalog.

Special Programs

Exceptions to the above policy will be made for students in the Educational Assistance Program, effective September, 1972. Students in this program will be subject to the above retention regulations at the end of the fifth term (regardless of the number of terms actually attended.) Good standing or probationary status is reviewed at the end of the fifth consecutive term after admission to the program. The term and cumulative grade point average at the end of the sixth term

determines whether the student is eligible to continue or is dropped for poor scholarship.

University Without Walls (UWW)

University Without Walls students shall be exempt from going on academic probation or being dropped for poor scholarship during the first 12 credit hours of formal course work taken at Northeastern. If a UWW student takes more than 12 hours of formal credit, the normal university academic regulations will apply. The above policy has no bearing on transfer credits nor on any formal course work not completed at Northeastern.

REGISTRATION AND RECORDS

REGISTRATION PROCEDURES

Currently enrolled students and students admitted or readmitted to the university three months prior to the beginning of a term, may be eligible to participate in the advance registration system. This allows students to request courses for the next term in advance. All eligible students receive registration materials from the Registration Office. Following the advance registration period, class schedules and bills are produced from the students' requests prior to the beginning to the term. Open and advance registration dates are published in the Schedule of Classes.

Eligible students who do not advance register may register for classes during the open registration period which is scheduled just prior to the beginning of each term.

Students who fail to complete all admissions requirements, English/mathematics placement examinations, tuition/fees, loan and other financial obligations, or receive disciplinary notices are subject to cancellation of their current and future registrations.

CONCURRENT REGISTRATION

Concurrent registration for undergraduates working toward a degree at Northeastern is permissible. Prior to enrolling at another university, the student at Northeastern must obtain written permission from his/her chairman/designated academic advisor, to be submitted to the Admissions and Records Office. Official forms and information concerning procedures are available at the Admissions/Records Information counter. Failure to follow appropriate procedures may jeopardize the acceptance of credits earned at another university or college. Students may not be enrolled at any other institution during the term graduation is anticipated. Normally, the last 30 consecutive credit hours must be completed at Northeastern in order to meet graduation requirements.

TRANSCRIPTS

Students may request an official transcript of their record by writing to the Records office or by completing a Transcript Request form. It is recommended that the student allow 7-10 **working** days for processing time from the date the transcript request is received. **All transcripts issued directly to the student will have an "issued to student" stamp affixed to the transcript.** Each graduating student will be sent a copy of his transcript at the time of graduation. Effective September 1990 students will be assessed a \$10.00 transcript fee at the time of their **first** registration at Northeastern Illinois University. This will allow the student to request official transcripts up to a reasonable limit at no additional cost.

Students who have a financial obligation to the university may not receive transcripts until the debt has been cleared.

CONFIDENTIALITY OF RECORDS

The Records Office assumes responsibility for the maintenance and integrity of student records. As an agent for the university and official custodian of student academic records, this office will release information only at the student's request and with his/her approval.

See the university policy on Release of Information Pertaining to Students as required by The Family Educational Rights and Privacy Act of 1974, elsewhere in this catalog.

DROPPING A CLASS/OFFICIAL WITHDRAWAL FROM THE UNIVERSITY

Consult the Schedule of Classes for refund policies and deadline dates.

Students must complete the appropriate "Change of Registration" form available at the Admissions/Records Information Counter. In special circumstances, at the discretion of each class instructor and with concurrence of the college dean, students may obtain approval for late withdrawal from class.

Unofficial withdrawal from the university may result in a grade of "F" (failure) being assigned.

Students who completely withdraw from the university must return all borrowed books to the library, pay any fines due and clear all outstanding accounts at the university.

BACHELOR'S DEGREE REQUIREMENTS

CHECKLIST:

1. Total Credits:

A **minimum** of 120 semester hours total must be earned by

every undergraduate student to be eligible to graduate from Northeastern.

2. Residency:

The last 30 consecutive credit hours must be taken at Northeastern.

3. General Education Program:

All undergraduate students must complete the General Education Program requirements.

4. Academic Major and Minor:

All undergraduates must satisfy the course and grade point requirements as a part of the major or minor requirements of the department of their choice.

5. Academic College:

All undergraduates must also satisfy the requirements of their individual college (College of Arts and Sciences, College of Business and Management, Center for Individualized Studies, College of Education).

6. Grade Point Average:

To be eligible to graduate, a student must have a minimum 2.0 GPA (overall "C" average). Some academic programs and departments have other specific grade requirements. Check with your academic advisor.

7. State Law Requirement:

All undergraduate students enrolled in state universities must meet the requirements of Senate Bill 195 which requires knowledge of the U.S. and Illinois State Constitutions. This requirement can be met by

- passing an examination given through the Political Science department, or
- passing PSCI-AMER-216.

No academic credit is given for passing the exam.

8. Every undergraduate student must pass the English Language Competence Exam offered regularly through the Testing Office.

9. Professional Education Requirements:

Students planning to teach at the elementary level must

- be admitted to the College of Education;
- complete all departmental requirements, and
- present a minimum GPA of 2.5 (on a 4.0 scale).

Students planning to teach at the secondary level must

- be admitted to the College offering the academic major of their choice;
- be admitted to the Teacher Education Program offered through the College of Education; and
- present a minimum GPA of 2.5 (on a 4.0 scale).

Prospective high school teachers are advised to prepare in more than one subject area by electing a second major or some combination of a major and one or more minors.

FILING FOR GRADUATION

Students must submit an Application for Graduation form and completed major forms (and minor forms, if applicable) to the Office of Admissions and Records when the following have been completed:

1. A minimum of 85 hours of credit has been earned;
2. Senate Bill 195 exam or course has been passed;
3. Student has been formally accepted by his/her major department;
4. English Competence Exam has been passed.

DEADLINES FOR FILING THE APPLICATION FOR GRADUATION FORM

Month of Anticipated Completion of Degree Requirements	Filing Deadline
April	Previous September 15
June/August	Previous January 16
December	Previous May 15

Each student anticipating graduation is totally responsible for filing the appropriate forms by the above deadlines. A student who files the required forms but fails to complete all graduation requirements by the appropriate date will be dropped from the graduation list and must reapply for a later graduation date by completing a Change of Graduation Date form available at the Admissions and Records Information Counter.

Only those students who have applied, been accepted for graduation, and successfully completed all requirements by the end of the preceding terms will be eligible to participate in the subsequent annual commencement ceremony.

Diplomas and final transcripts are not released to graduates until they have paid the graduation fee and all holds and/or indebtedness to the university have been resolved.

SECOND BACHELOR'S DEGREE

Students who wish to earn a second bachelor's degree must submit a completed Northeastern undergraduate application form and an official college transcript from a regionally accredited institution which awarded the first baccalaureate degree to the Office of Admissions.

Course work used to fulfill requirements for a previous undergraduate major or master's degree may **not** be used to fulfill requirements for the second bachelor's major. A minimum of 30 additional credit hours must be earned in residence after the first degree has been awarded.

Students may not be enrolled in or pursuing two degree programs simultaneously.

Applicants for the second bachelor's degree are subject to all undergraduate regulations and must meet all university requirements for graduation.

HONORS RECOGNITION

Effective June 1988 baccalaureate degree students who graduate with at least a 3.5 grade point average will be awarded Honors recognition:

cum laude	(with distinction) 3.5-3.74 GPA
magna cum laude	(with great distinction) 3.75-3.89 GPA
summa cum laude	(with highest distinction) 3.9-4.0 GPA

INSTRUCTIONAL SUPPORT SERVICES

ACADEMIC COMPUTING

Academic Computing provides service to faculty and students to support instruction and research. Computer terminals are available in the Library, Science Building, and Classroom Building. Additional information can be obtained from the office at extension 5115.

LIBRARY

The Ronald Williams Library is located west of the Science Building. It has five floors totalling over 150,000 square feet and contains approximately 580,000 volumes, 1600 reader stations, and numerous study areas. Special features include facilities for the handicapped, private study areas for faculty and graduate students, and a classroom for library instruction. In addition, over 1,000,000 other educational support items such as recordings, microfilms, maps, documents, filmstrips, pamphlets and periodicals are housed in the library. Check at the main circulation desk for library hours.

References

Help in using the library's collection and locating information for study and research is available at the reference service desk, located on the main floor. Reference assistance is also available at the service desks on the second and third floors.

Circulation

Library users may charge out materials at the circulation desk situated to the right of the entrance on the first floor. Staff at the circulation service desk will search for materials not found on the shelves, hold items requested by users, and handle overdue and lost materials.

Reserve

Library materials selected by instructors for reading assignments in course offerings are kept at Reserve located in the Circulation Service area. A card catalog listing items on reserve is situated near the reserve service desk.

Interlibrary Loan and Database Search Services

As a member in ILLINET Online (IO) Northeastern's students, faculty, and staff have access to the holdings of 34 academic and 900 public and special libraries in the state of Illinois. With a valid ID card library patrons may check out materials from IO libraries at the circulation service area. Names of IO member libraries are posted near terminals throughout the Library building. Northeastern's Library also holds memberships in several local, state, and national library consortia which own diverse, specialized research materials. Arrangements for access to the services available through these affiliations should be made at the reference service area.

The Library subscribes to several computerized databases available on CD-ROM user-friendly terminals located on the first, second, and third floors of the building. In addition, upon appointment, the reference department offers online search services for many more computerized databases. There are charges for some of these searches, and users are billed for time spent online.

Special Collections

Archives

The library is a member of IRAD (Illinois Regional Archives Depository) for the Chicago area. It holds and services part of the city's archival materials and also maintains the historical documents for the university. These materials are located on the lower level of the library, and assistance is provided by a librarian and several IRAD interns.

Periodicals and Government Documents

The periodical and government document collections are located on the second floor. The Library subscribes to more than 3000 periodical titles. Listings of periodical titles are at the service areas on the first, second, and third floors. Northeastern's Library is a depository for both federal and Illinois state documents. Staff at the periodical reference and documents service desk is available for assistance in locating documents of municipal and international agencies, other states, and foreign countries.

Curriculum Materials

This collection, located on the third floor, is designed to support course work in professional education and children's literature. It includes children's books, school texts, curriculum guides, and a complete file of Educational Resource Information Center (ERIC) materials.

UNIVERSITY MEDIA SERVICES

Northeastern offers opportunities to learn and teach through the use of a wide variety of film, television, slide and sound programs, and other audio-visual materials. These are either purchased or rented from national distributors or produced in

the university's own studios. Although some departments have specialized media laboratories, the majority of audio-visual materials, equipment, production studio facilities, and professional help for instructional and administrative activities are provided by the Media Services area of the Library.

Center for Inner City Studies

The university provides a separate library to support the Inner City Studies program. The collection of over 19,000 books, periodicals, microforms, and other research materials is located at 700 East Oakwood Boulevard.

STUDENT LIFE

ACTIVITIES PROGRAM

Student Life at Northeastern is enhanced by an activities program including some 60 organizations. Students can participate in Student Government, ethnic organizations, academic interest groups, various media organizations, and other special interest groups. Involvement in these groups promotes individual student development and contributes significantly to the diversity and richness of campus life.

Student Government, an important adjunct of Student Activities, provides valuable opportunities for students to develop leadership abilities as well as to serve on all-University committees and boards. Student senators and officers typically are involved in many other functions of the activities program.

INTERCOLLEGIATE ATHLETICS

Since 1965, intercollegiate athletics at Northeastern has provided an educationally sound athletic program that fosters the growth and well-being of athletically gifted students. Dedicated to providing a spirit of camaraderie for the entire university community, all students are admitted to home events when they present a valid Northeastern identification card.

The program operates under the auspices of the National Collegiate Athletic Association, (NCAA), Division I. Women compete in volleyball, basketball, softball, tennis, cross country and swimming/diving. Men compete in cross country, golf, basketball, tennis and swimming/diving.

INTRAMURALS AND RECREATION

The purpose of the Intramural and Recreation Program is to provide an opportunity for all students, faculty, and staff to enjoy satisfying experiences related to their particular needs, varying from the highly competitive types to those of a non-competitive and recreational nature. Recreation activities include swimming, basketball, volleyball, weight training, badminton, table tennis, fencing, aerobics, tennis, archery,

and racquetball. The physical education complex provides many opportunities for participation as the building is open from 7:00 a.m. to 10:00 p.m. Monday-Thursday, 7:00 a.m. - 5:00 p.m. Fridays, and 9:00 a.m. - Noon on Saturdays.

Intramural competition is offered in male, female co-recreational divisions and club sports.

Intramural competition includes softball, volleyball, badminton, table tennis, basketball, tennis, flag football, racquetball and wallyball.

ACADEMIC DEVELOPMENT

Kaylene A. Gebert, Ph.D., Dean and Professor of Speech and Performing Arts

Rory Donnelly, Ph.D.; Associate Professor of Linguistics, Coordinator of English Language Program

Murrell Duster, M.Ed.; Assistant Professor, Curriculum and Instruction, Coordinator of Advising and Tutoring

Roosevelt Gordon, Jr., M.A.; Assistant Professor, Student Services, Counselor-Coordinator, Project Success

Miriam Ocasio-Collazo, M.S.Ed.; Counselor-Coordinator of Proyecto Pa'Lante

Alfreda Williams, M.A.; Educational Project Associate, Student Support Services

The Office of Academic Development provides quality academic and support service programs for Northeastern students. The office is responsible for the following areas: Academic Advising; the Tutorial Center; English Language Program (ELP); Skills Labs; Special Programs, which include Student Support Services, Project Success and Proyecto Pa'Lante; Summer transition programs; University-wide Placement and Competency examinations through the Testing/Assessment Office, and El Centro, a community outreach center. This office works to establish or continue liaisons between all support services within the University; encourages innovative approaches to instruction; assists underprepared students; participates in liaison activities with other institutions and supports services and programs for entering student populations. Students and faculty advisory councils provide suggestions and feedback on the activities and programs of the office.

ADVISING PROGRAM

The University Advising Program provides academic and developmental advising for all undergraduate students who have not declared majors. Through the Advisement Center and its staff, each student is assigned a university advisor, usually a faculty member, who guides the student through course and program selection, testing and other general education requirements, and the process of career choice and personal development. Students remain with their uni-

versity advisors until they declare a major, at which time the major department will assign a major advisor.

Special advisors are available for students interested in pre-engineering, pre-law and pre-professional health sciences programs. The Advisement Center will provide further information.

THE TUTORIAL CENTER

Housed in the library, the Tutorial Center offers assistance to individuals and groups in General Education courses in various disciplines. Tutors are graduate assistants familiar with the materials and demands of the courses. This assistance supplements tutoring available in the Foreign Language, English Language, Mathematics, and Reading Laboratories. In music and the sciences, some tutoring is provided in other locations.

Mathematics and Reading Labs

Located in the library, these laboratories provide tutoring and other out-of-class assistance to students.

ENGLISH LANGUAGE PROGRAM

Rory Donnelly, Ph.D., Professor of Linguistics, Coordinator
Harold N. Hild, Ph.D., Professor of Speech and Performing Arts

C. Jeriel Howard, Ph.D., Professor of English
Sandra Hunt, Ph.D., Associate Professor of English
Myrna Knepler, Ph.D., Professor of Linguistics
Audrey Reynolds, Ph.D., Professor of Linguistics

The English Language Program provides the opportunity for students to acquire the level of oral and written English Language skills expected of university students. Classes and individualized help are available.

The Program's **Writing Laboratory** offers tutoring to all students in the university who want help with the development of their writing skills. The professional staff is trained to work with students on a one-to-one basis during all the stages of the writing process, from the development of ideas to revision and editing. Self-help materials and word processing training are also available.

No majors or minors are offered through this special program. See the department listings for ENGLISH and LINGUISTICS for majors and minors.

COURSE OFFERINGS

ELP-DEV-090 Language Competence Skills, 3 cr. (May not be applied towards graduation.) This course is designed for students who, despite prior college-level course work in writing, are unable to pass the English Competency Exam. It

provides them with intensive, individualized instruction in the skills associated with college level competency in writing.

ELP-DEV-099 Developmental Writing, 3 cr. (May not be applied towards graduation.) This course provides native speakers of English with intensive work on basic writing skills such as planning, organizing and revising an essay, and emphasizes the development of sentence level skills and proofreading techniques.

ELP-ESL-108 Listening and Speaking, 3 cr. (Non-native speakers of English only.) Practice in the listening and speaking skills used in American universities, with emphasis on comprehension of brief academic lectures, presentation of brief reports, and participation in class discussion.

ELP-ESL-110 English Grammar Skills, 3 cr. (Non-native speakers of English only.) Analysis of and practice in selected English grammatical patterns, with special emphasis on their academic application.

ELP-ESL-111 English for the Spanish-Speaking I, 3 cr. (Non-native speakers of English only.) A course for intermediate to advanced learners of English as a second language, focusing on the language skills necessary for working with college level texts in English.

ELP-ESL-112 English Language Workshop I, 3 cr. (Non-native speakers of English only.) Basic principles of personal essay writing in English, with emphasis on developing sentence level skills.

ELP-ESL-113 English for the Spanish-Speaking II, 3 cr. (Non-native speakers of English only.) Continuation of English for the Spanish-Speaking I, focusing on language skills necessary for interpreting college level texts in English.

ELP-ESL-114 English Language Workshop II, 3 cr. (Non-native speakers of English only.) Introduction to the basic principles used in writing expository essays based on personal experience, and intensive work to improve sentence level skills.

ELP-ESL-120 English Language Workshop III, 3 cr. (Non-native speakers of English only.) Practice and instruction in writing expository essays, with emphasis on paragraph development, increased fluency in written English, and proofreading skills.

ELP-118 Academic Skills, 3 cr. Practice and instruction in the skills students need to succeed in college, such as taking notes, managing time, reading textbooks, writing from sources, thinking critically, and studying for and taking exams.

ELP-280 Library Research Methods, 3 cr. Bibliographic tools in a variety of areas are examined, and while the individual subject interests of students are taken into account, students are encouraged to explore areas with which they are not familiar. Discussions on the nature of information, its organization and dissemination.

SPECIAL PROGRAMS

The Office of Special Programs sponsors three on-going programs (Project Success, Proyecto Pa'Lante, and Student Support Services) for students with special academic, social

or cultural needs. Students in these programs are given a two year adjustment period to meet university academic requirements. They must actively participate in the assistance programs provided and show evidence of academic progress.

Project Success

Project Success recruits and assists inner-city students who have academic potential but lack the necessary skills to meet standard admission requirements. Counseling help is provided, attendance at group and individual tutorial services is required. Confidence-building and development of good study habits are significant by-products of this project.

Proyecto Pa'Lante

Proyecto Pa'Lante is a uniquely organized, comprehensive, educational and related support service program designed to recruit and serve primarily Latino students from the inner-city who demonstrate academic potential but might not meet the requirements for general admission. After admission, the program provides support services for its students in the areas of counseling, academic advisement, tutoring, career development and cultural reinforcement. These services are designed to assist students in their adjustment to the university, to enhance their scholastic achievement, and to encourage their persistence in completing a Bachelor's degree.

Proyecto Pa'Lante es un programa diferentemente organizado, comprensivo y educacional. Cuyos servicios han sido creados para regular y servir primariamente estudiantes Latinos que demuestren potencial academico pero que quizas no reunan los requisitos exigidos por admision general.

Despues de la admision, el programa provee servicios de apoyo para sus estudiantes en areas de orientacion personal, ayuda academica, tutoria, un buen desarrollo de profesion y reforzamiento cultural que ayudara al estudiante a adaptarse a la universidad; en esta forma, aumentar el logro academico y la persistencia para adquirir un titulo universitario.

Student Support Services

The Student Support Services Program, funded by the United States Department of Education, provides support services to students enrolled or accepted for enrollment at Northeastern. Acceptance into this program is based upon the student's academic potential and ability to meet one (or in some cases, two) of the following eligibility criteria: 1) low income; 2) first generation college student or 3) documented physical or learning disability. The services consist of assistance with financial aid forms, registration, and course selection; orientation activities; supportive counseling; academic advisement; and career development.

Handicapped Educational Liaison Program (HELP)

The purpose of the Handicapped Educational Liaison Program (HELP) is to afford disabled students equal opportunity

for post-secondary education by providing reasonable accommodations and services. The program provides academic assistance to students with documented physical or learning disabilities, based on diagnosed needs.

HELP provides registration/advising assistance, notetakers, interpreters, readers, scribes, taped texts, accessibility information, and information about community resources. The HELP Office, located in B-110, also has a TDD phone. Students with disabilities should visit the HELP Office before the semester starts to arrange accommodations.

Outreach Program

El Centro de Recursos Educativos/Educational Resource Center, located at 2400 North Western Avenue, Chicago, is the university's outreach center for the Hispanic-American community. Known as El Centro, this field center provides educational opportunities to members of the Hispanic community in or near their own neighborhoods. Located in the northwest area of Chicago, El Centro is easily accessible to residents of West Town, Humboldt Park and Logan Square.

El Centro orients community residents to higher education, provides university resources, improves the quality of life and increases employment opportunities through skills develop-

ment. El Centro serves the non-traditional college student population by providing admission, registration, academic advisement and other student services on site.

During each academic year, El Centro offers courses including natural sciences, behavioral and social sciences, humanities and electives which fulfill the university's General Education Program requirement as well as develop students' competence in languages and academic skills.

The sequences taught at El Centro by full- and part-time faculty permit students to carry a full academic load of 12 credit hours during both the fall and spring terms, with additional credit hours during the summer terms. Many courses are taught bilingually in Spanish and English. Both instruction and course work may be conducted in the language agreed upon between students and teachers. In addition to the courses offered for academic credit, non-credit offerings, such as lecture series, seminars and workshops are held throughout the academic year for the benefit of students and non-student residents of the immediate area.

For more information, contact El Centro office, 2400 North Western Avenue, Chicago, Illinois 60647. Telephone (312) 384-1766 from 11 a.m. to 8 p.m. Monday through Thursday.

THE GRADUATE COLLEGE

Vincent F. Malek, Ph.D., Professor of Music, Dean
Edward J. Vokurka, M.A., Coordinator of Graduate Records
Maxine Jacks, M.A., Coordinator of Graduate Admissions

The Graduate College provides the atmosphere and facilities in which qualified students pursue advanced studies and join faculty in extending knowledge through research and other scholarly activities.

The Graduate College offers the majority of its coursework during the late afternoon and evening hours to accommodate individuals who are pursuing a master's degree on a part-time basis. Students wishing to carry a full academic load should anticipate course scheduling limitations and plan accordingly.

Applications for most programs are accepted on a continuing basis throughout the year.

ORGANIZATION OF THE GRADUATE COLLEGE

The dean is responsible for implementation of institutional policies related to the Graduate College. Such policies are established in collaboration with the Graduate College Advisory Committee, a group elected by and from the faculty. Graduate advisors are assigned by the disciplines in which the graduate students are enrolled.

Student inquiries, applications, and petitions should be directed to the graduate office, room 4029.

GENERAL ADMISSION REQUIREMENTS

All applicants who wish to be admitted to the Graduate College at Northeastern Illinois University must submit applications and official transcripts to satisfy the following general requirements:

ACCREDITATION

The Graduate College is accredited by the North Central Association of Colleges and Secondary Schools and the Department of Public Instruction of the State of Illinois. It is also a member of the Council of Graduate Schools in the United States, and the Midwestern Association of Graduate Schools, and a charter member of the Illinois Association of Graduate Schools.

1. Possession of a degree from an accredited college or university.
2. Demonstration of a high level of scholastic ability as reflected by an undergraduate grade point average of 2.75 or better (4-point scale). All course work completed prior to the bachelor's degree is computed in this average. Any previous graduate credit is also taken into appropriate consideration.

Degree transcripts from foreign schools require special evaluation. Accordingly, a delay in processing the application should be anticipated.

ADMISSION TO A DEGREE PROGRAM

Admission to a specific master's degree program requires:

1. Fulfillment of the general requirements for admission to the Graduate College.
2. Submission of the graduate application for admission.
3. Arrangement for our receipt of one copy of the transcript from each college/university previously attended, other than Northeastern Illinois University. Work showing as transfer credit on the transcript of another institution does not negate the requirement for the original transcript of such credit.

The Graduate College does not normally accept in-hand transcripts submitted by students. Once a transcript has been received it cannot be released from the files of the Graduate College. Delay in the receipt of transcripts will delay evaluation of the application. It is the applicant's responsibility to arrange for receipt of transcripts by the graduate office directly from the colleges/universities previously attended.

4. Satisfactory completion of the published program prerequisites.
5. An average of at least B (3.0) in the undergraduate work that is the foundation for the master's program.
6. Departmental or program committee approval. The final decision rests with the faculty of the appropriate department.

Conditional admission to a degree program may, in some cases, be granted upon the approval of the dean and the program advisor. Conditional status may result from:

1. Degree from a foreign institution or one that does not have regional accreditation.

2. Lack of specific program prerequisites. Completion is required by such time as deemed appropriate by the dean and by the program advisor.

3. A marginal (2.25-2.74) and/or erratic undergraduate record.

Students admitted conditionally must achieve a minimum B (3.0) average in the first 12 credits in the program; otherwise, the admission will be rescinded. Such students could, however, continue to take courses as graduate students-at-large subject to the regulations appropriate thereto.

After the application has been evaluated, the student will receive a letter from the Graduate College indicating the results. If the evaluation is not completed by the time of registration, the student may register as a graduate student-at-large. Foreign students requiring an I-20 form (Certificate of Eligibility for Nonimmigrant Student Status) are not eligible to register until admitted to a degree program.

Since each graduate degree program has its own specific course requirements, it is imperative that the student assume the responsibility for contacting the assigned advisor in the program. The letter of admission will identify the advisor. The student should arrange for an appointment with the advisor well in advance of any registration period. Detailed program counseling cannot be done, and should not be expected, at registration time.

REQUIREMENTS FOR DEGREE APPLICANTS

In addition to the requirements for admission to the Graduate College and to a specific master's degree program, the student is also responsible for the following:

1. The majority of courses applied to the master's degree must be 400-level; a limited number of appropriate 300-level courses are applicable. Workshops and institutes, which are designed to meet their own specific needs or purposes, are not normally acceptable.

2. Education courses that prepare students for initial teacher certification are not applicable to master's degree programs.

3. All graduate credits within the scope of the specific master's program, not only those actually applied, must average at least B (3.0). No more than six hours of C credit is acceptable. Grades below C bear no credit toward the degree. The student will become ineligible for the degree and will be dropped from the program upon receiving grades below B in four courses (three for the Exercise Science and Cardiac Rehabilitation Program).

4. Graduate students will be dropped from the University for poor scholarship if, upon completion of four courses, they have less than a C (2.0) cumulative grade point average, and/or have not maintained a term grade point average of 2.0 or better.

5. To remain in good standing in a degree program in the

Graduate College, the student must make satisfactory progress on a continuing basis. Lack of progress will normally result in the student being dropped from the program.

DOCUMENTS TO BE SUBMITTED BY DEGREE APPLICANTS

From the time of admission to a graduate program to the awarding of the master's degree, the applicant must submit to the graduate office the following documents in the sequence indicated:

1. **Application for Admission** to the Graduate College. See "Admission to a Degree Program."

2. **Application for Acceptance to Candidacy** for the master's degree. This form should be submitted after the student has been admitted to a degree program. It is due upon completion of 12 credit hours of coursework with a grade point average of at least B (3.0). A maximum of six hours of coursework accepted on transfer from other colleges/universities may apply. All provisions for students admitted conditionally must be satisfied.

3. **Application for Graduation.** After the student has been accepted for degree candidacy, and there is reasonable expectation for graduation, the application for graduation should be filed according to dates specified in the Schedule of Classes. A non-refundable and non-transferable graduation fee must accompany the application. This fee cannot be carried over if the student fails, for any reason, to graduate on schedule. Extensions and/or exceptions cannot be granted and should not be requested.

Upon evaluation of the graduation application, the student will receive a response from the Graduate College indicating outstanding requirements and whether or not there is a possibility for completion of all requirements by a deadline date. The deadline is approximately six weeks prior to the end of the student's final term, and requirements must be satisfied by that date.

4. The deadline date for COMPLETION OF ALL REQUIREMENTS means that the graduate office must receive official notification of completion no later than the specified deadline date. This refers to all coursework, incomplete removals, special papers, oral/written examinations, acceptance of thesis by the graduate office, and payment of fees.

TRANSFER OF CREDITS, TIME LIMITATIONS, ETC.

1. A minimum of 21 credit hours of graduate work applicable to the program must be taken at Northeastern Illinois University before the master's degree will be awarded.

2. Courses taken as a graduate student-at-large at Northeastern Illinois University are not automatically accepted in a master's program. The eligible maximum is nine credits, and such work would have to correspond to specific program requirements and satisfy all scholastic requirements of the Graduate College.

3. A maximum of nine credit hours of transfer credit from other colleges/universities may be accepted. Students desiring to transfer credits must first be admitted to a degree program and write a letter of petition to the dean. The course(s) in question should be identified by title, number, and a general description. A transcript of the work must be on file in the graduate office. The criteria for acceptance are a) the work must have been completed at an accredited institution, b) it must be relatively recent, c) the grade(s) must be at least B, and d) the course(s) must be applicable to the degree sequence.

4. In the case of graduate credit taken at colleges/universities outside of the United States, recommendation of the appropriate department and approval of the dean are required. Documentation of work abroad will be necessary, and consultation with an outside agency may be required.

5. A maximum of six credit hours taken at Northeastern Illinois University, prior to the granting of the bachelor's degree, may be considered for acceptance for a master's program if these credits a) have not been applied to the baccalaureate degree, b) are applicable, and c) were completed no more than 12 months prior to the date of baccalaureate graduation.

6. The graduate program must be completed within a period of six years. Course credit will be withdrawn for any work completed more than six years prior to the granting of the master's degree.

7. Students applying for waiver of specific course requirements through demonstration of competence may petition the appropriate department or program committee. If a waiver is approved, the student must complete an equal number of alternate credits.

THESIS PROCEDURES

The Thesis Seminar Approval form may be obtained from the graduate office. Completed forms must be submitted to the records office at least one week prior to registration.

The "Manual of Thesis Procedures" is available without charge from the graduate office. Students who write a thesis or do a project as part of their graduate degree requirements are expected to be familiar with and to follow the guidelines as indicated in this pamphlet.

CERTIFICATION OF STATUS

If a graduate student has completed all academic requirements and is awaiting the formal awarding of a degree, the dean of the Graduate College will, upon the student's written request, issue a letter certifying the student's status. Such letters are normally accepted by boards of education for salary increment purposes and by other universities as certification that the degree has been earned.

EXCEPTIONS

Exceptions to the published regulations of the Graduate College may be made only after approval of the dean, following the submission of a written petition.

CHANGES IN POLICY

Northeastern Illinois University reserves the right to make policy changes from time-to-time when necessary.

MASTER'S DEGREE PROGRAMS

The following master's degree programs are presently being offered by the Graduate College of Northeastern Illinois University. Coursework is offered essentially on an extended-day basis for part-time students. Applications are accepted on a continuous basis, except as otherwise indicated. There is no application fee.

M.S. BIOLOGY

M.B.A. BUSINESS ADMINISTRATION

M.S. CHEMISTRY

M.S. COMPUTER SCIENCE

M.S. EARTH SCIENCE

M.A. EDUCATIONAL ADMINISTRATION*

Administration Concentration

Community College Concentration

Chief School Business Official Concentration

M.S. EXERCISE SCIENCE AND CARDIAC REHABILITATION**

M.A. GEOGRAPHY AND ENVIRONMENTAL STUDIES:

Geography and Environmental Studies

Urban Land Use Planning

M.A. GERONTOLOGY

M.A. GUIDANCE AND COUNSELING:

Community and Family Counseling

Elementary School Level

Secondary School Level

Vocational Counseling

M.A. HISTORY

M.A. HUMAN RESOURCE DEVELOPMENT

M.A. INNER CITY STUDIES

M.A. INSTRUCTIONAL MEDIA

M.Ed. LANGUAGE ARTS, TEACHING OF

M.A. LINGUISTICS

M.A. LITERATURE

M.S. MATHEMATICS

M.A. MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS

M.A. MUSIC

M.S. PHYSICS

M.A. POLITICAL SCIENCE

M.A. READING

M.A. SPECIAL EDUCATION:

Early Childhood Special Education

Educating Children with Behavior Disorders

Educating Handicapped Adolescents

Teaching Children with Learning Disabilities

Teaching Educable Mentally Handicapped Children
and YouthTeaching the Gifted and Talented Child
Teaching Trainable Mentally Handicapped
Children and Youth

M.A. SPANISH***

M.A. SPEECH

* Cooperative program with Chicago State University and
Governors State University** Contact graduate office for periods when applications
are accepted.*** Cooperative program with Roosevelt University which
awards the degree.

COLLEGE OF ARTS AND SCIENCES

Battista Galassi, Ph.D., Professor of Spanish, Acting Dean
Therese Schuepfer, Ph.D., Associate Professor of
Psychology, Acting Associate Dean

The College of Arts and Sciences is the largest of the University's colleges. It comprises 22 departments which offer 15 master's degrees, 24 bachelor's degrees, and 31 minors. In addition, the College is responsible for the General Education program. As the College offers most of the general education courses, it serves all of the University's undergraduate students.

It is the goal of the College to help students develop their individual view of the world by acquiring social and cultural awareness as well as a broad knowledge of a number of disciplines. The fine arts, humanities, natural sciences, social sciences, and professional studies all contribute to enriching students' intellectual lives and enabling them to grow into more aware and responsible citizens.

It is a further goal of the College to provide undergraduate major programs in a variety of both traditional and career-oriented disciplines. Therefore many departments, in cooperation with local business, industry, and social agencies offer their majors the opportunity for field experience or internships in addition to course work.

UNDERGRADUATE MAJORS

Baccalaureate degrees are offered in the following disciplines:

Anthropology
Art
Biology
Chemistry

Computer Science
Criminal Justice
Earth Science
Economics
English
Environmental Studies
French
Geography
History
Linguistics
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Social Work
Sociology
Spanish
Speech

Certification for teaching in secondary schools is available for the following disciplines:

Art
Biology
Chemistry
Earth Science
English
French
Geography
History
Mathematics
Music
Physics
Social Science
Spanish
Speech

Students interested in teaching in secondary schools should consult the appropriate department entry **and** the Secondary Education section of this catalog.

Elementary education minors are offered in:

Art
English
Foreign Languages

Linguistics
Mathematics
Music
Natural Science
Social Science
Speech

Students interested in teaching in elementary schools should consult the appropriate department entry **and** the Elementary Education section of this catalog.

UNDERGRADUATE MINORS

Anthropology
Art
Asian Studies
Biology
Chemistry
Computer Science
Dance
Earth Science
Economics
English
French
Geography and Environmental Studies
German
Gerontology
Greek Studies
History
Italian
Linguistics
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Public Administration
Russian
Social Work
Sociology
Spanish
Speech
Women's Studies

GRADUATE PROGRAMS

Departments in the College of Arts and Sciences offer 15 master's degree programs comprising 16 sequences. The programs are listed below together with their sequences.

General requirements for graduate admission to the University and to specific degree programs can be found in the Graduate College section and in the appropriate departmental sections of this catalog. Graduate students who have specific questions should contact the appropriate departmental office.

Master of Science in Biology

Master of Science in Chemistry
Master of Science in Computer Science
Master of Science in Earth Science
Master of Arts in Geography and Environmental Studies
Geography and Environmental Studies
Urban Land Use Planning
Master of Arts in Gerontology
Master of Arts in History
Master of Arts in Linguistics
Master of Arts in Literature
Master of Science in Mathematics
Master of Arts in Mathematics
For Elementary School Teachers
Master of Arts in Music
Master of Science in Physics
Master of Arts in Political Science
Master of Arts in Speech

DECLARATION OF MAJOR

Students who wish to declare a major must complete the Declaration of Major form and submit it to the appropriate major department. Forms are available in all departmental offices. All declared majors should request the name of an advisor from their major departments.

In certain programs special requirements must be fulfilled prior to admission to the major program. Students should consult the appropriate sections of this catalog for additional information, and contact the departmental chairperson, program coordinator or departmental advisor to discuss these requirements.

GRADUATION REQUIREMENTS

Students in the College of Arts and Sciences must meet all university requirements as well as the specific requirements for graduation within their particular major.

Students must earn a grade of "C" or higher in all courses counted toward the major.

Students must earn a grade of "C" or higher in all courses counted toward the minor, cognate areas or areas of concentration.

Transfer students must complete a minimum of 15 credit hours in courses at the 200 and/or 300-level in their majors at Northeastern Illinois University.

To be counted toward the major, courses transferred to the University must:

1. carry a grade of "C" or higher; and
2. be accepted by the student's major department.

DEPARTMENTS/ PROGRAMS

ANTHROPOLOGY

L. Jayne Botscharow, Ph.D., Professor
James Macdonald, M.A. Assistant Professor
Manuel Moreno, Ph.D., Associate Professor
Stanley M. Newman, Ph.D., Professor
Margo L. Smith, Ph.D., Professor, Chairperson
Nancy A. Spencer, M.A., Assistant Professor

Anthropology is the study of people as physical and cultural beings throughout time and in today's world. The goal of anthropology is to develop greater understanding of ourselves and other people. Such knowledge can help us adapt in many ways to the diverse society in which we live.

The department of Anthropology offers courses in social/cultural anthropology, archaeology, and physical anthropology leading to the degree of Bachelor of Arts.

UNDERGRADUATE PROGRAMS

Major in Anthropology for the Bachelor of Arts Degree

Required Courses:

ANTH-212	Cultural Anthropology.....	3 cr.
ANTH-215	Human Origins.....	3 cr.
ANTH-355	History of Anthropological Theory.....	3 cr.
ANTH-362	Senior Seminar in Anthropology I.....	3 cr.
ANTH-363	Senior Seminar in Anthropology II.....	3 cr.
	One archaeology course.....	3 cr.
	Two ethnographic survey courses from different geographic areas ("Peoples of...", "Indigenous Peoples of North America").....	6 cr.
	Three additional 300-level anthropology courses.....	9 cr.
	Total	33 cr.

Minor in Anthropology (18 cr. hrs.)

Required Courses:

ANTH-212	Cultural Anthropology.....	3 cr.
ANTH-215	Human Origins.....	3 cr.
	Twelve credit hours in anthropology as approved by the designated department advisor.....	12 cr.
	Total	18 cr.

NOTE: Students must earn a grade of "C" or better in all courses used to fulfill requirements for the major and minor programs in anthropology.

COURSE OFFERINGS

ANTH-113 Introduction to Anthropology, 3 cr. An introduction to anthropology, in which we try to understand what people are like and how we got that way. Includes human biology, human physical and cultural evolution, and varieties of modern life-styles. "What makes humans human?" and "Why are some humans different from others?" are questions the course attempts to answer.

ANTH-212 Cultural Anthropology, 3 cr. The concepts of cultural anthropology applied cross-culturally. Primary focus is on custom, behavior and ideology relating to daily life, social organization, economy, politics, kinship and religion in non-western societies of Asia, Africa, Latin America and Oceania; examples for comparative purposes may be drawn from the U.S. and Europe.

ANTH-214 Peoples of Africa, 3 cr. A survey of the diversity of African societies, with emphasis on sub-Saharan Africa. Includes pre-colonial and colonial history.

ANTH-215 Human Origins, 3 cr. Investigates who we are and where we came from; an introduction to human biological and cultural evolution. Fossils, archaeology, and evidence from living people and animals are pieced together in looking at our adaptations through time.

ANTH-216 Latin American Archaeology, 3 cr. The evolution of culture in Mexico, Central America, South America, and the Caribbean with emphasis on Mexico and Guatemala. Slides and other illustrative materials are used extensively.

ANTH-217 North American Archaeology, 3 cr. Prehistory of Native Americans (American Indians) in the United States and Canada, evolution of their cultures from the Ice Age to the Seventeenth Century A.D. through examination of their artifacts. Extensive use is made of visual materials to illustrate cultural development.

ANTH-218 Old World Archaeology, 3 cr. Intensive study of the beginnings of human cultural development and of the cultural processes that led to food production, urbanization, and civilization in the Old World.

ANTH-223 Indigenous Peoples of North America, 3 cr. Survey of the cultures of North American Indian tribes at the time of contact with Europeans. The record of Indian-non-Indian relationships from colonial times to the present is analyzed in the light of its impact on changing Indian culture and society.

ANTH-231 Urban Anthropology, 3 cr. Historical and comparative study of urban development with emphasis on the process of sociocultural change and such topics as urban theory and methodology, conceptions of the city, rural-urban migration, poverty, ethnic/class divisions, and urban planning.

ANTH-232 Psychological Anthropology, 3 cr. Rela-

tionship between culture and the development of the personality. What is the effect of culturally different child-training techniques on the child's personality? How do society's goals, values, and attitudes affect the parents' behavior? Stresses the ideal personality and how parents, teachers, and others try to develop it.

ANTH-234 American Folklore, 3 cr. Social and historical survey of American folklore from colonial days to the twentieth century. Includes New England tombstones, frontier lore, cowboys, outlaws, and blues singers.

ANTH-240 Topics in Anthropology, 3 cr. Exploration and analysis of contemporary topics (such as tourism, world cultures in film, and comparative social systems) from an anthropological perspective. Consult the Schedule of Classes for specific topics.

ANTH-243 Culture and International Business, 3 cr. For business students as well as anthropology students interested in a business career. How do cultural factors influence business success? How can you be more effective in your work assignment by understanding the cultural context of your work place? Emphasis on marketing and management. Examples from Japan, the Middle East, Latin America, etc.

ANTH-303 Pacific Islanders, 3 cr. Ethnographic survey of the peoples and cultures of the Pacific Island areas of Melanesia, Polynesia, and Micronesia, emphasizing continuities between traditional times and today.

ANTH-304 Peoples of India, 3 cr. Ethnographic survey of the contemporary peoples and cultures of India, emphasizing the continuity as well as the diversity within that ancient civilization.

ANTH-305 Peoples of South America — The Anthropology of South America, 3 cr. Ethnographic survey of the contemporary peoples and cultures of South America. Selected Indian cultures, peasant communities, and urban societies are compared.

ANTH-308 Peoples of Mexico, Central America, and the Caribbean, 3 cr. Ethnographic survey of the contemporary peoples and cultures of Mexico, Central America, and the Caribbean Islands. Emphasis is on Spanish and Indian language areas. In-depth examination of 4-6 cases.

ANTH-309 Egyptian Archaeology, 3 cr. The study of ancient Egyptian society and culture, traced from the late Predynastic through the New Kingdom periods with emphasis on the archaeological evidence: settlement patterns, monuments, and other artifacts in their spatial and temporal contexts. Slides and other illustrative materials are used extensively.

ANTH-310 Middle Eastern Archaeology, 3 cr. Study of ancient cultures of the Middle East, emphasizing Greater Mesopotamia, the region of the Tigris-Euphrates River drainage, from prehistoric times to the fifth century B.C.; artifacts, monuments, and settlement patterns of ancient Mesopotamian societies. Slides and other illustrative materials are used extensively.

ANTH-311 Kinship and Social Structure, 3 cr. Structure of society in terms of kinship relations and kinship

groups. Cross-cultural examples from non-Western and Western societies are used to illustrate various approaches to the study of kinship and to explain why kinship studies are important. *Prereq.:* ANTH-212 or consent of instructor.

ANTH-313 Witchcraft and Sorcery, 3 cr. Study of some of the supernatural explanations of evil with major emphasis on the description of the various forms of these beliefs and the reasons, both conscious and unconscious, for these beliefs. Examples are drawn from the non-Western world, medieval through seventeenth century Europe and Old and New England.

ANTH-314 Religion, Society and the Individual, 3 cr. Study of the ways that religions, both past and present, act to support or alter the social systems or sub-systems with which they are associated. The ways that individuals respond to the value systems and world views of various religions are examined, as well as the individual motivations for adherence to the various religions.

ANTH-315 Greek Archaeology: Bronze Age, 3 cr. Cultural remains of Bronze Age Greece are used to reconstruct society from 3000 B.C. Extensive use is made of color slides of sites and artifacts.

ANTH-316 Greek Archaeology: Classical Age, 3 cr. Cultural remains of Classical Greece are used to reconstruct society from 1000 B.C. to 336 B.C. Extensive use is made of color slides of sites and artifacts.

ANTH-317 Health, Illness, and Culture, 3 cr. What are the thoughts, practices, and habits concerning "health", "illness", and the management of the body and person in daily and ritual situations? American customs, folk medicine and healing techniques are examined and compared to the beliefs and behaviors of other cultures. What are the roles of the "healer", "patient", and physician as culture defines them? What is the relationship between "medicine" and "religion"?

ANTH-333 Proseminar in Urban/Applied Anthropology, 3 cr. Urban/applied topics such as, urban ethnography, medical anthropology, museology, public archaeology, ethnic assimilation, and educational anthropology. Detailed discussions, preparation, and critique of projects based on library, field or laboratory work. Consult the Schedule of Classes for specific topics. (Formerly ANTH-URB-333)

ANTH-341 Culture and Poverty, 3 cr. An in-depth examination and analysis of poor peoples. Special attention is paid to the external forces of the larger society, the coping mechanisms of the poor and the existing life styles found in low-income communities.

ANTH-345 Physical Anthropology, 3 cr. What can physical (biological) anthropology tell us about human variation? Hands-on experience with human bones and other tissues of the body at the microscopic and macroscopic levels. Problems in human evolution and adaptation to different environments are investigated. Selected topics in physical anthropology are discussed, such as: biology and behavior (sociobiology); earliest humans, problems in interpreting Pliocene hominids; range of variation in living populations.

Prereq.: ANTH-215 and 3-6 hours in biology or consent of instructor.

ANTH-350 Proseminar in Anthropology, 3 cr. Advanced study and analysis of selected topics in subfields of anthropology, such as: races of the world, archaeology of the biblical world, food beyond survival, and sports and games in many cultures. Consult the Schedule of Classes for specific topics.

ANTH-351 Independent Study in Anthropology, 3 cr. Independent study of methods, concepts, and special topics in anthropology, archaeology, ethnology, physical anthropology, etc. *Prereq.:* ANTH-212 or consent of instructor.

ANTH-352 Archaeological Methods, 3 cr. Study of the techniques of recovery, analysis and interpretation of archaeological data; demonstration of some of the equipment employed in archaeological field work. Theoretical value and limitations of the data; some of the contributions of science to their interpretation. *Prereq.:* ANTH-212 and ANTH-215 (for majors); ANTH-113 (for non-majors).

ANTH-353 Independent Study in Anthropology, 1 cr. (See ANTH-351 for description.)

ANTH-354 Independent Study in Anthropology, 2 cr. (See ANTH-351 for description.)

ANTH-355 History of Anthropological Theory, 3 cr. Discussion of major theoretical approaches to the understanding of human behavior including a discussion of the cultural context of anthropologists. *Prereq.:* ANTH-212 and senior standing or consent of instructor.

ANTH-362 Senior Seminar in Anthropology I, 3 cr. Advanced instruction in appropriate areas such as: research design, interviewing techniques, establishing rapport, library research, scientific methodology, questionnaire development, and nature of fieldwork. Must be taken in the senior year, followed by ANTH-363. Written and oral presentation of a senior project is required.

ANTH-363 Senior Seminar in Anthropology II, 3 cr. (See ANTH-362 for description.)

ANTH-401 Independent Graduate Study in Anthropology, 3 cr. Intensive and guided study and research in selected topics of anthropology. The student will be responsible for the preparation of an extensive paper or project.

Prereq.: graduate standing, nine hours in anthropology, and consent of instructor.

ART

Donald Bulucos, M.F.A., Professor
Merrie Cutts, M.F.A., Assistant Professor
Frederick Evers, M.F.A., Assistant Professor
Jean Gillies, Ph.D., Professor
Mark McKernin, M.F.A., Assistant Professor
Dennis Mitchell, M.F.A., Associate Professor
LaVerne Ornelas, M.F.A., Professor, Chairperson
Russell Roller, M.F.A., Professor
Mary Stoppert, M.F.A., Professor
Jane Weintraub, M.F.A., Associate Professor

The fundamental objective of the Art Department programs is to teach the visual arts in ways that will provide and

promote a knowledge and critical understanding of spatial and tangible art forms. In addition, the Department teaches a variety of skills through hands-on experience so students will be equipped to express concepts in visual media and to pursue professional careers in the graphic arts or in teaching.

The Department offers two sequences leading to the degree of Bachelor of Arts. In addition, the Department offers separate minors in Art for Elementary Education majors and for Liberal Arts students. Both the major and minor Liberal Arts programs allow students to select areas of emphasis in studio or art history in consultation with departmental advisors. Students wishing to be certified for teaching art in secondary schools must select the emphasis in studio art. The Department of Art may require studio art majors to lend for exhibit one or more pieces of their art work from each studio course and, before graduation, to donate at least one piece chosen by a faculty committee to the University's permanent art collection.

The special requirements of studio courses demand regular attendance. More than three absences may result in a failing grade.

Transfer students are required to consult the departmental undergraduate advisor regarding an interview and/or portfolio review prior to registering for art courses at Northeastern.

The department of Art offers advanced courses for undergraduate students, in-service teachers and post-graduate students. Prerequisites are strictly enforced.

The following required courses are offered on a rotational basis. Students need to plan their programs accordingly.

ART-201 Contemporary Art (Fall and Spring)
ART-220 Drawing II (Fall)
ART-234 (Color) (Fall)
ART-360 Contemporary Art Education in Intermediate Grades (Fall)
ART-392 Senior Project (Winter)
C&I-SCED-303A Contemporary Art Education in the Secondary School (Fall)
C&I-SCED-305A Secondary Student Teaching and Seminar in Art (Winter)

UNDERGRADUATE PROGRAMS

Major in Art for the Bachelor of Arts Degree

All undergraduate students majoring in art must complete the following 15 hour core requirement:

ART-101 Art in Society3 cr.
ART-106 Introduction to Art History3 cr.
ART-120 Drawing I.....3 cr.
ART-130 Two-Dimensional Design3 cr.
ART-140 Three-Dimensional Design3 cr.

Total 15 cr.

Emphasis in Studio Art

Students who select an emphasis in Studio Art complete the following courses:

ART-201 Contemporary Art	3 cr.
ART-220 Drawing II	3 cr.
ART-234 Color	3 cr.
ART-392 Senior Project	3 cr.
300-level art history courses	6 cr.
Three of the following:	9 cr.
ART-230 Introduction to Painting	3 cr.
ART-240 Introduction to Sculpture	3 cr.
ART-250 Introduction to Printmaking	3 cr.
ART-261 Introduction to Photography	3 cr.
ART-270 Introduction to Ceramics	3 cr.
ART-273 Introduction to Studio in Metals/Jewelry	3 cr.
ART-281 Introduction to Commercial Art	3 cr.
ART-282 Introduction to Computer Graphics	3 cr.

Three courses in an area of concentration selected in consultation with an advisor	9 cr.
One art elective	3 cr.
Core Courses	15 cr.
Total	54 cr.

Students wishing to be certified for teaching art in secondary schools should consult the secondary education section of this catalog.

Emphasis in Art History

Students who select an emphasis in Art History complete the following courses:

ART-202 Methods of Research in Art History	3 cr.
Seven courses at the 300-level in Art History, selected in consultation with an advisor	21 cr.
Core Courses	15 cr.
Total	39 cr.

In addition, there must be a demonstration of reading competence in a foreign language approved by the advisor or 6 credit hours of a foreign language.

Minor in Art for the Bachelor of Arts Degree in Elementary Education

Required Courses:

ART-101 Art in Society	3 cr.
ART-106 Introduction to Art History	3 cr.
ART-120 Drawing I	3 cr.
ART-130 Two-Dimensional Design	3 cr.
ART-140 Three-Dimensional Design	3 cr.
ART-230 Introduction to Painting	3 cr.
ART-250 Introduction to Printmaking	3 cr.

ART-360 Contemporary Art Education in Intermediate Grades	3 cr.
One of the following:	3 cr.
ART-261 Introduction to Photography	3 cr.
ART-240 Introduction to Sculpture	3 cr.
ART-270 Introduction to Ceramics	3 cr.
ART-273 Introduction to Studio in Metals/Jewelry	3 cr.
One 300-Level Art History	3 cr.
Total	30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

Minor in Art (18-21 cr. hrs.)

Emphasis in Studio Art

Students who select an emphasis in Studio Art complete the following courses:

ART-101 Art in Society	3 cr.
ART-106 Introduction to Art History	3 cr.
ART-120 Drawing I	3 cr.
ART-130 Two-Dimensional Design	3 cr.
ART-140 Three-Dimensional Design	3 cr.
Two of the following:	6 cr.
ART-230 Introduction to Painting	3 cr.
ART-240 Introduction to Sculpture	3 cr.
ART-250 Introduction to Printmaking	3 cr.
ART-261 Introduction to Photography	3 cr.
ART-270 Introduction to Ceramics	3 cr.
ART-273 Introduction to Studio in Metals/Jewelry	3 cr.
Total	21 cr.

Emphasis in Art History

Students who select an emphasis in Art History complete the following courses:

ART-106 Introduction to Art History	3 cr.
Five courses at the 300-level in Art History, selected in consultation with an advisor	15 cr.
Total	18 cr.

COURSE OFFERINGS

ART-101 Art in Society, 3 cr. Study of the function of art in a variety of cultures with specific reference to American culture. Application of insights gained through inter-cultural analysis of contemporary issues. Slide lectures, films, gallery, and museum visits.

ART-106 Introduction to Art History, 3 cr. Meanings and functions of the visual arts in Western history with emphasis on how and for what purposes artists have created

visual art forms. Basic terminology and definitions through analysis of forms, style and techniques; value judgments, taste, and the viewer's appreciation of art forms through an understanding of their historical context. Slide lectures and museum assignments.

ART-120 Drawing I, 3 cr. Basic drawing, stressing individual perceptual growth and the importance of physical and psychological factors in structuring visual experiences; emphasis on design and perception; discussion of systems of perceptual interpretation and structure, concepts of abstraction, and problems of evaluation.

ART-130 Two-Dimensional Design, 3 cr. Systematic exploration of order in two-dimensional space and study of the interaction of method and technique in organizing form on a two-dimensional surface.

ART-140 Three-Dimensional Design, 3 cr. Studio experience and lecture exploring fundamental 3-D design theory and concepts through the solution of studio problems utilizing 3-D materials and techniques.

ART-180 Introduction to Art for the Non-Art Major, 3 cr. Problem-solving approach in studio experiences with lecture and discussion. Required for elementary education majors. The course does not count towards major or minor requirements in Art.

ART-190 Introduction to Ceramics for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-191 Introduction to Metalwork and Jewelry for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-192 Introduction to Painting for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-193 Introduction to Photography for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-194 Introduction to Printmaking for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-195 Introduction to Sculpture for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-196 Introduction to Drawing for the Non-Art Major, 3 cr. Problem solving approach in studio experiences with lecture and discussion. The course does not count towards major or minor requirements in Art.

ART-201 Contemporary Art, 3 cr. Study of painting and sculpture of the last ten years; gallery and museum visits; readings in contemporary art publications; slide lectures.

ART-202 Methods of Research in Art History, 3 cr. Introduction to art historical research methodology, including

the use of library resources, indices, bibliographies, and primary source material. Writing skills, style, and methods of citation will be emphasized.

ART-220 Drawing II, 3 cr. Interpretive drawing experiences, concentration on individual growth and perceptual acuity, principally studying the human form through live models, other supportive materials and a variety of media. **Prereq.:** ART-120.

ART-230 Introduction to Painting, 3 cr. Studio examination of the technical development of visual communication by means of design, symbol, and image; exploration of painting media. **Prereq.:** ART-130 or consent of instructor.

ART-231 Painting Techniques and Processes I: General Aqueous Media, 3 cr. Studio problems emphasizing individual exploration of aqueous media such as transparent watercolor, gouache, casein, tempera. **Prereq.:** ART-230 or consent of instructor.

ART-232 Painting Techniques and Processes II: General Non-Aqueous Media, 3 cr. Studio problems emphasizing exploration of non-aqueous media such as oil painting, encaustic, lacquers. **Prereq.:** ART-230 or consent of instructor.

ART-233 Painting Techniques and Processes III: Contemporary Media, 3 cr. Studio problems emphasizing individual exploration of contemporary media such as acrylic polymer, air brush, oil compatible acrylic, reflective surfaces, transfer processes. **Prereq.:** ART-230 or consent of instructor.

ART-234 Color, 3 cr. Investigation of color phenomena through lecture and studio problems. **Prereq.:** ART-130.

ART-240 Introduction to Sculpture, 3 cr. Traditional and contemporary sculpture concepts; introductory studio experience in modeling and casting, carving, and construction techniques. **Prereq.:** ART-140 or consent of instructor.

ART-241 Sculpture I: Figure Modeling and Casting, 3 cr. Studio problems with a focus on the human figure; exploration of casting materials and techniques by means of clay and plaster modelling; mold-making; and plastics casting. **Prereq.:** ART-240 or consent of instructor.

ART-242 Sculpture II: Carving, 3 cr. Studio problems involving traditional and contemporary carving techniques using wood and stone. **Prereq.:** ART-240 or consent of instructor.

ART-243 Sculpture III: Wood and Metal Shop, 3 cr. Studio problems involving areas of the students' choice: woodworking; metal welding and brazing; plastic fabrication; using hand and power tools. **Prereq.:** ART-240 or consent of instructor.

ART-250 Introduction to Printmaking, 3 cr. Introduction to major printmaking techniques including studio projects in intaglio, relief, stencil, and planographic processes. **Prereq.:** ART-120 and ART-130 or consent of instructor.

ART-251 Printmaking: Relief, 3 cr. Introduction to the processes of relief printing; experimentation with and analysis of expressive qualities of design elements in the relief printing media. **Prereq.:** ART-250 or consent of instructor.

ART-252 Printmaking: Intaglio, 3 cr. Introduction to the processes of intaglio printing; emphasizing the expressive qualities of etching and engraving. **Prereq.:** ART-250 or consent of instructor.

ART-253 Printmaking: Lithography, 3 cr. Introduction to the planographic process of printing; experimentation with

and analysis of lithography as a process for the solution of visual design problems. *Prereq.:* ART-250 or consent of instructor.

ART-254 Printmaking: Serigraphy, 3 cr. Introduction to the techniques of serigraphy; emphasizing the qualities of stencil printing. *Prereq.:* ART-250 or consent of instructor.

ART-260 Theory and Practice of Calligraphy, 3 cr. Lecture and laboratory experiences with ancient and contemporary alphabets, with emphasis on developing skills for planning layouts and two-dimensional designs. *Prereq.:* ART-130 or consent of instructor.

ART-261 Introduction to Photography, 3 cr. Lecture and laboratory experiments in basic photographic processes, camera techniques, and printing with an emphasis on photography as a creative medium.

ART-262 Photography II, 3 cr. Continuation and expansion of ART-261. Concentration on visual concepts and technical competence in black and white photography. Students develop a personal body of photographic prints, professional in quality and concept. *Prereq.:* ART-261 or a portfolio of photographic work that demonstrates equivalent proficiency.

ART-270 Introduction to Ceramics, 3 cr. History of ceramics; sequential studio problems in hand building methods, surface treatment, and glazing of ceramics.

ART-271 Ceramics II, 3 cr. Introduction to the chemistry of clay bodies and glazes; sequential studio problems in using the wheel in building with clay. *Prereq.:* ART-270.

ART-273 Introduction to Studio in Metals/Jewelry, 3 cr. Experience in the fundamental processes of working with small metals and jewelry design including soldering, cutting, forming, stone setting, and finishing techniques.

ART-280 Introduction to Interior Design, 3 cr. Study of the materials and accessories of decoration; their selection and arrangement on the basis of use, price, taste, and individuality. Problems of design and discriminative taste provide exercises in room planning.

ART-281 Commercial Art, 3 cr. Introduction to techniques and concepts of visual communications/commercial art; historical and contemporary social aspects; typography, layout, display, image-making; lectures, seminars, and workshop. *Prereq.:* ART-120 and ART-130 or consent of instructor.

ART-282 Introduction to Computer Graphics, 3 cr. Introductory experience on a graphics computer; overview of the field. *Prereq.:* ART-120 and ART-130.

ART-283 Rendering Techniques in Advertising Art, 3 cr. Techniques and skills needed for the execution of advertising design problems, including an understanding of the materials appropriate to those techniques. Discussion of the principles and terminology used in production. *Prereq.:* ART-130.

ART-284 Keyline/Pasteup, 3 cr. Basic course in the techniques needed for the production of camera-ready materials ranging from two-dimensional designs to packaging.

ART-290 Careers in Art, 3 cr. Presentation of career opportunities in the visual arts through research, interviews, field trips and classroom visits by artists.

ART-302 Studies in Art History, 3 cr. Selected offerings on special topics in art history. Consult the Schedule of Classes for specific topics.

ART-303 Images of Woman in Art, 3 cr. Iconographical study of the images of woman in the visual arts. Exploration into stereotypes, archetypes, and prototypes in the context of historical and societal conditions, using primary literary sources and archaeological evidence to support interpretive hypotheses.

ART-304 Studies in Tribal Arts, 3 cr. Selected offerings on special topics in tribal arts. Consult the Schedule of Classes for specific topics.

ART-310 Early Christian and Byzantine Art, 3 cr. Study of the arts from the early Christian period to the end of the Byzantine Empire in the east: stylistic and iconographic development of architecture, painting, mosaics, manuscript illustration, and minor arts in the context of contemporary politics and religion.

ART-311 Medieval Arts of the West, 3 cr. A study of art from the Merovingian period to the end of high Gothic: Stylistic and iconographic development of architecture, painting, sculpture, manuscript illustration, and minor arts in the context of political and religious controversies.

ART-312 Painting of the Italian Renaissance, 3 cr. Painting in Italy from 1200-1600; iconography and aesthetics, social and technical aspects, development of style with brief attention to the most important examples of sculpture and architecture insofar as they aid in an understanding of the development of painting; slide lectures, museum visits.

ART-313 Painting of the United States of America, 3 cr. Survey of American painting from the Colonial period through mid-twentieth century; social and technical aspects, development of various styles; slide lectures, museum visits.

ART-314 History of Architecture to 1800, 3 cr. Survey of architectural forms and concepts from ancient times to the beginning of the nineteenth century.

ART-315 History of Modern Architecture, 3 cr. Architecture from the early nineteenth century to the present with emphasis on the Chicago School of Architecture and its contributions.

ART-316 Seventeenth and Eighteenth Century Art, 3 cr. Painting, sculpture and architecture in Europe in the seventeenth and early eighteenth centuries, stressing historical, stylistic and iconographic developments in the art of the period with emphasis on leading Baroque artists in Italy, Spain, Flanders, Holland, France and Germany.

ART-317 Sculpture and Architecture of the United States, 3 cr. Sculpture and architecture of the United States from the Colonial period through mid-twentieth century. Social and technical aspects, development of various styles; slide lectures, museum visits.

ART-318 Nineteenth Century European Art, 3 cr. Survey of European painting and sculpture from the late 18th century through the early decades of the 20th century, with emphasis upon major artistic developments in the context of pertinent historical and social issues and the general cultural milieu.

ART-319 Twentieth Century European Art, 3 cr. European painting and sculpture from post-impressionism at the close of the nineteenth century through the various modern-

ist movements of the twentieth century with emphasis on major theories and developments in art in the context of pertinent historical, social and cultural events and concerns of the period.

ART-320 Studio in Advanced Drawing, 3 cr. Interpretive drawing experiences directed to individual growth and personal style. Use of live models, other supportive materials, and a variety of media. *Prereq.:* ART-220 or consent of instructor.

ART-330 Studio in Advanced Painting, 3 cr. Studio problems emphasizing personal development and expression in an area of the student's choice. *Prereq.:* ART-231, ART-232, or ART-233 or consent of instructor.

ART-340 Studio in Advanced Sculpture, 3 cr. Studio problems emphasizing personal development and expression in an area of the student's choice. *Prereq.:* ART-242, or ART-243 or consent of instructor.

ART-350 Studio in Advanced Printmaking, 3 cr. Studio problems in design and expression through one or more of the graphic processes; advanced work in the processes of relief stencil, intaglio, and/or planographic printing. *Prereq.:* ART-251 or ART-252 or ART-253 or consent of instructor.

ART-360 Contemporary Art Education in Intermediate Grades, 3 cr. Inquiry and understanding of the many problems of communication in teaching art in the intermediate grades. *Prereq.:* ART-130 or equivalent and consent of instructor.

ART-362 Studio in Advanced Photography, 3 cr. Concentration on experimental and technical problems. Discussion of expressional and functional aspects of photography. Altered cameras, film formats, chemicals, and papers. Final presentation and individual review of a portfolio of works demonstrating aesthetic and technical competence in black and white photography. *Prereq.:* ART-262 or a portfolio of works demonstrating comparable proficiency.

ART-370 Studio in Advanced Ceramics, 3 cr. Investigation of various advanced ceramic processes, techniques, and critical analysis of historical and contemporary work. *Prereq.:* ART-271 or consent of instructor.

ART-373 Studio in Metals, 3 cr. Advanced processes of working with small metals and jewelry design, such as fusing or soldering, forming, cutting, casting, stone setting, and finishing. *Prereq.:* ART-273 or consent of instructor.

ART-381 Studio in Graphic Design, 3 cr. Principles involved in the thought process, creation and production of a design project. Lecture and discussion. Suggested readings supplement the class experience. *Prereq.:* ART-281 and ART-284.

ART-382 Advanced Computer Graphics, 3 cr. Principles involved in the creation of story-boards in connection with animation, two and three-dimensional graphics and various outputs. Suggested readings supplement the lecture-discussion portion of class. *Prereq.:* ART-282.

ART-383 Studio in Illustration, 3 cr. Principles involved in the thought process, creation and production of an image-making problem. Lecture and discussion. Suggested readings will supplement the class experience. *Prereq.:* ART-281.

ART-384 Internship in Commercial Art and Design, 3 cr. On-site experience in an industrial shop or commercial agency observing and participating in the everyday activities and projects. *Prereq.:* ART-281, ART-284 and junior standing.

ART-390 Independent Study in Visual Art, 3 cr. Individual investigation into a topic of the student's choice. *Prereq.:* senior standing or consent of advisor.

ART-391 Studio in Visual Art, 3 cr. Intensive studies in specialized areas with extensive use of studio and outside source materials. Consult the Schedule of Classes for specific topics. *Prereq.:* junior standing or consent of instructor.

ART-392 Senior Project, 3 cr. Portfolio preparation in a chosen field; exhibition of selected works. *Prereq.:* senior standing.

ASIAN STUDIES

Kusol Varophas, Ph.D., Professor of Political Science,
Program Coordinator

UNDERGRADUATE PROGRAM

Minor in Asian Studies (18 cr. hrs.)

- Courses selected to complete this minor
 - must be chosen from two or more academic disciplines,
 - must include at least 12 hours in 300-level courses,
 - must cover material about more than one Asian country, and
 - cannot be counted toward meeting requirements for any other major or minor.
- The student must secure the approval of the Program Coordinator for the list of courses selected to complete the minor. This approval should be requested well before the completion of the courses themselves.

BIOLOGY

William T. Barnes, Ph.D., Professor
Robert F. Betz, Ph.D., Professor
Simon L. Chung, Ph.D., Associate Professor
George Diepstra, Ph.D., Associate Professor
Don J. Fanslow, Ph.D., Professor
Dennis M. Hall, Ph.D., Professor
Wilma H. Lehmann, Ph.D., Professor, Chairperson
Jules M. Lerner, Ph.D., Professor
Edward F. Lutsch, Ph.D., Professor
Eugene W. McArdle, Ph.D., Professor
Arthur A. Scharf, Ph.D., Professor
Patricia A. Smith, Ph.D., Professor
Herbert J. Stoltze, Ed.D., Professor

The Department of Biology offers courses of study leading to the degrees of Bachelor of Science and Master of Science. Broadly based undergraduate and graduate programs prepare students for careers in biology or for more advanced study in the biological sciences and related fields.

At the undergraduate level, biology majors may choose from the general biology sequence, the environmental sequence, and the pre-professional sequence. In addition, a biology minor and an area of concentration in the natural sciences

for elementary education majors are available. The department offers as well a graduate program.

All majors should seek advisement prior to each registration. When registering, the following general guidelines for course selection should be observed:

1. BIOL-100 Introduction to Biology, BIOL-104 The Changing Natural Environment, BIOL-106 Biology of Human Reproduction, BIOL-107 Biological Effects of Foods and Drugs, and BIOL-BOT-101 Plants and People may **not** be used to satisfy the major or minor requirements in biology.
2. Students with an inadequate chemistry background are advised to take CHEM-200 Introduction to General Chemistry before taking the required CHEM-211 General Chemistry I.
3. Students with an inadequate mathematics background are advised to take MATH-102 Intermediate Algebra before taking the required MATH-106 Pre-Calculus Mathematics for Non-Mathematics Majors.
4. Students with an inadequate physics background are advised to take PHYS-200 Introduction to College Physics before taking the required PHYS-201 College Physics I.

Requirements for Secondary Education Certification

The Major in Biology for the Bachelor of Science Degree (general biology sequence) should be completed in order to meet the requirements for secondary teacher certification. Students seeking certification to teach biology in secondary schools may elect to complete the optional Environmental Emphasis with the general biology sequence. In completing the Major in Biology, students seeking certification must earn 8 semester hours in botany including 5 semester hours in laboratory work and 8 semester hours in zoology including 5 semester hours in laboratory work. In addition, they should consult the Secondary Education section of this catalog.

UNDERGRADUATE PROGRAMS

Major in Biology for the Bachelor of Science Degree

General Biology Emphasis

This sequence provides an organized, yet flexible system of courses which effectively meets the demands of students seeking a broadly based undergraduate focus in biology. It also serves students wishing to be certified for teaching biology in secondary schools.

Required Biology Courses:

BIOL-102	Biology of Organisms.....	3 cr.
BIOL-103	Biology of Populations	3 cr.

BIOL-201	Biology of Cells	3 cr.
BIOL-311	Genetics	3 cr.
BIOL-316	Biochemistry	4 cr.
BIOL-BOT-321	Plant Ecology or	
BIOL-ZOOL-325	Animal Ecology	3 cr.
BIOL-BOT-318	General Plant Morphology or	
BIOL-ZOOL-315	Invertebrate Zoology or	
BIOL-ZOOL-326	Animal Kingdom	3 cr.
BIOL-BOT-315	Plant Physiology or	
BIOL-ZOOL-312	Vertebrate Physiology or	
BIOL-ZOOL-328	Animal Physiology	3-4 cr.
Electives		12 cr.
Total		37-38 cr.

Required 300-level courses must include **one botanical** course and **one zoological** course.

Electives must be at the 200 or 300-level. At least 2 electives must have a laboratory component.

Required Cognate Courses:

CHEM-211	General Chemistry I	5 cr.
CHEM-231	Organic Chemistry I	4 cr.
PHYS-201	College Physics I and PHYS-203	
	Physics I Laboratory	3,1 cr.
PHYS-202	College Physics II and PHYS-204	
	Physics II Laboratory	3,1 cr.
MATH-106	Pre-Calculus Mathematics for	
	Non-Mathematics Majors	4 cr.
Choose two from the following:		6 cr.
	Chemistry Elective (CHEM-212 or higher)	
	Earth Science Elective (ESCI-206 or higher)	
	Mathematics Elective (MATH-105 or higher)	
	Physics Elective (PHYS-215 or higher)	
BIOL-323	Physical Methods in Biology	
Total		27 cr.

Students are encouraged to enroll in MATH-273 Statistics with Applications as part of their General Education requirements.

Pre-Professional Emphasis

This program is designed for students planning to apply to professional schools in dentistry, medicine, optometry, osteopathic medicine, pharmacy, podiatric medicine, or veterinary medicine. Completion of the general sequence in biology is required. In addition, certain courses are recommended to prepare students for application to professional schools. Such recommended courses are not specifically required for graduation; students always remain free to substitute their own choices. The selection of recommended courses, where options exist, depends on the particular career interest and individual needs. Students should therefore consult a pre-professional advisor. Students are also encouraged to carefully select courses in the humanities and behavioral sciences beyond the General Education requirements.

Biology Courses:

1. BIOL-ZOOL-312 Vertebrate Physiology, rather than BIOL-BOT-315 Plant Physiology is recommended.
2. For their twelve credit hours of biology electives, students should choose from courses in genetics, anatomy, physiology, microbiology, and courses emphasizing molecular and quantitative aspects of biology.

Required Cognate Courses:

CHEM-211	General Chemistry I	5 cr.
CHEM-231	Organic Chemistry I	4 cr.
PHYS-201	College Physics I	3 cr.
PHYS-202	College Physics II	3 cr.
PHYS-203	Physics I Laboratory	1 cr.
PHYS-204	Physics II Laboratory	1 cr.
MATH-106	Pre-Calculus Mathematics for	
	Non-Mathematics Majors	4 cr.
Choose from the following:		6 cr.
	Chemistry Elective (CHEM-212 or higher)	
	Earth Science Elective (ESCI-206 or higher)	
	Mathematics Elective (MATH-105 or higher)	
	Physics Elective (PHYS-215 or higher)	
BIOL-323	Physical Methods in Biology	
Total		27 cr.

CHEM-212 General Chemistry II and CHEM-232 Organic Chemistry II are recommended.

Students should also complete one course in mathematics beyond MATH-106, preferably MATH-107 Calculus I.

Environmental Emphasis

This sequence provides an organized system of courses which will effectively train students in environmental biology by emphasizing both laboratory and field work. It expands the general biology sequence to include additional field-oriented courses for liberal arts majors in biology as well as students wishing to be certified for teaching biology in secondary schools. Many of the courses could also serve students from other departments who are interested in environmental problems.

Required Biology Courses:

BIOL-102	Biology of Organisms	3 cr.
BIOL-103	Biology of Populations	3 cr.
BIOL-201	Biology of Cells	3 cr.
BIOL-311	Genetics or	
BIOL-312	Evolution	3 cr.
BIOL-331	Ecological Methods	3 cr.
BIOL-BOT-318	General Plant Morphology	3 cr.
BIOL-BOT-314	Local Flora or	
BIOL-ZOOL-327	Local Fauna	3 cr.
BIOL-BOT-315	Plant Physiology or	
BIOL-ZOOL-312	Vertebrate Physiology or	
BIOL-ZOOL-328	Animal Physiology	4,3 cr.
BIOL-ZOOL-325	Animal Ecology or	
BIOL-BOT-321	Plant Ecology	3 cr.

BIOL-ZOOL-326	Animal Kingdom or	
BIOL-ZOOL-315	Invertebrate Zoology	3 cr.

Select two courses.....	6 cr.
BIOL-318 General Microbiology.....	3 cr.
BIOL-326 Biological Geography.....	3 cr.
BIOL-328 Aquatic Biology.....	3 cr.
BIOL-BOT-311 General Mycology.....	3 cr.
BIOL-BOT-316 Phycology.....	3 cr.
BIOL-BOT-321 Plant Ecology.....	3 cr.
BIOL-ZOOL-313 Entomology.....	3 cr.
BIOL-ZOOL-314 Ornithology.....	3 cr.
BIOL-ZOOL-316 Animal Behavior.....	3 cr.
BIOL-ZOOL-319 Protozoology.....	3 cr.
BIOL-ZOOL-325 Animal Ecology.....	3 cr.

Required Internships:

May be taken concurrently. (Senior standing only.)

BIOL-332	Internship in Environmental Biology I	3 cr.
BIOL-333	Internship in Environmental Biology II	3 cr.
Total		42-43 cr.

Required Cognate Courses:

CHEM-211	General Chemistry I	5 cr.
CHEM-231	Organic Chemistry I	4 cr.
ESCI-211	Physical Geology	4 cr.
MATH-106	Pre-Calculus Mathematics	4 cr.
PHYS-201	College Physics I	3 cr.
PHYS-202	College Physics II	3 cr.
PHYS-203	Physics I Laboratory	1 cr.
PHYS-204	Physics II Laboratory	1 cr.
Total		25 cr.

Recommended Courses:

CHEM-212	General Chemistry II	
ESCI-315	Glacial and Quaternary Geology	
ESCI-323	Field Geology	
ESCI-329	Soil Science	
ESCI-335	Meteorology I	
G&ES-205	Physical Geography: Climate, Vegetation and Soils	
G&ES-206	Physical Geography: Landforms	
G&ES-322	Aerial Photographic Interpretation in Geography	
G&ES-378	Physical Climatology	
MATH-273	Statistics with Applications	

Minor in Biology (18 cr. hrs.)

Students who have declared biology as an academic minor must earn an over-all GPA of 2.0 (on a 4.0 scale) in the minor.

As per University policy effective as of January 1, 1990, "D" grades are not acceptable in the biology minor.

Requirements for the biology minor are:

Select two of the following:.....	6 cr.
BIOL-102 Biology of Organisms	3 cr.

BIOL-103 Biology of Populations.....	3 cr.
BIOL-201 Biology of Cells	3 cr.
Biology electives	12 cr.
Select 4 courses in consultation with a biology advisor. Three of the 4 courses must have a laboratory component. If BIOL-201 was not chosen as one of the two required basic biology courses, it may be chosen as one of the four elective courses.	
Total	18 cr.

NOTE: BIOL-100, BIOL-104, BIOL-106, BIOL-107, and BIOL-BOT-101 do not fulfill requirements for the minor.

GRADUATE PROGRAM

Master of Science in Biology

The graduate program is designed to serve both teachers and those who intend to work in various capacities for which advanced biological training is necessary. A sound basis is also provided for further graduate study. Laboratory work and introduction to research methodology are integral to the program. Topical areas studied include genetics; molecular biology; morphology and/or taxonomy: animal or plant; physiology: animal or plant; ecology: animal or plant. Selection in the last three areas must include a minimum of one botanical and one zoological course.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

- Specific biology area prerequisites: a minimum of 15 undergraduate credit hours representing courses in the topical areas listed above.
- A minimum of 26 credit hours as follows:
 - at least eight credit hours of laboratory chemistry, including one course in organic chemistry;
 - at least four credit hours of laboratory physics;
 - at least six credit hours of mathematics including pre-calculus mathematics or college algebra, and statistics;
 - the balance of credits may have been earned in any combination of chemistry, physics, earth science and mathematics.

Requirements for the Degree:

Graduate students in biology have three options:

Option I: at the invitation of the Department, the student may complete a research thesis, or

Option II: complete a library thesis, or

Option III: select the non-thesis program.

Option I is recommended for individuals who desire a research-

oriented program. The research experience is particularly suitable for those students who plan to do further graduate study and for those who are working in applied fields in biology. The Library Thesis and Non-Thesis Options are recommended for those students who desire a more flexible approach to graduate training in biology.

Summary of Required Credit Hours:

	Option I	Option II	Option III
Graduate Biology course work (including research credit):	33	36	36
Undergraduate Requirements Biology (including those that satisfy biology area requirements):	15	15	15
Total Credits (including graduate and required undergraduate biology):	48	51	51

Research Thesis Option

Emphasis is placed on graduate courses at the 400-level including six hours of credit for the research thesis (BIOL-499 Research Thesis). Students are not expected to enroll in non-research biology seminars. BIOL-481 Biological Literature is required, however. While there is no final comprehensive examination, students present an oral defense of their thesis. Admission to this option is by departmental invitation only.

Library Thesis Option

At least one course at the advanced undergraduate or the graduate level must be completed in each of the five topical areas listed above. In addition, a minimum of 19 hours of graduate biology credit at the 400-level is required, including three hours of library thesis credit (BIOL-497 Thesis Seminar). Of these 19 credits, there must be at least one hour, but no more than three hours, of non-research biology seminar credit (BIOL-403 Seminars in Biology). BIOL-481 Biological Literature is required. There is a final comprehensive examination.

Non-Thesis Option

The requirements for this option are the same as those for the Library Thesis Option with one exception: students are not required to take BIOL-497 Thesis Seminar. The final comprehensive examination is required.

The graduate program is to be planned with the guidance of the graduate advisor in biology. At the time of acceptance to degree candidacy, the option the student will follow is identified.

COURSE OFFERINGS

BIOL-100 Introduction to Biology, 3 cr. The problems of living things with emphasis on human physiology and the propagation of life. Covers major biological concepts and

principles. Lecture and laboratory. (Does not fulfill major or minor requirements in biology.)

BIOL-102 Biology of Organisms, 3 cr. Problems of life at the organismal level. Support and movement, nutrition and energy relations, transport of materials, waste disposal, coordination and regulation, reproduction, and growth and development are considered in relation to both plants and animals. Lecture and laboratory.

BIOL-103 Biology of Populations, 3 cr. Problems of life at the population level. Hereditary basis of variability and homogeneity; factors influencing the gene pool; concept of species; diversification of life in time; populations in their environment. Lecture and laboratory.

BIOL-104 The Changing Natural Environment, 3 cr. Attitudes towards the natural environment. Exploitation of the natural plant and animal communities and the effects of overpopulation and increasing pollution of the environment on the biological world. Lecture only. (Does not fulfill major or minor requirements in biology.)

BIOL-106 Biology of Human Reproduction, 3 cr. Anatomy, physiology, and development of reproductive function in humans; applications of basic biological principles to the control of fertility, infertility, and related topics. Lecture only.

BIOL-107 Biological Effects of Foods and Drugs, 3 cr. Biological effects of diets, medications, drugs, and agents such as alcohol, nicotine, and caffeine with emphasis on their relation to body structure, function, and health. Lecture only. (Does not fulfill major or minor requirements in biology.)

BIOL-201 Biology of Cells, 3 cr. Problems of life at the cellular level; fundamental dynamics of life; basic molecular and cellular level processes including photosynthesis, respiration, and membrane structure and function; synthesis of macromolecules. Lecture and laboratory. *Prereq.:* one course in general chemistry with laboratory or CHEM-200; and BIOL-102, and BIOL-103, or equivalent.

BIOL-306 Workshop in Biology I, 1 cr. Designed primarily for in-service teachers. Course may be repeated as long as the title is different. Workshop credits may not be used toward the Master of Science degree in Biology. Consult the schedule of classes for specific topics. *Prereq.:* Baccalaureate degree.

BIOL-307 Workshop in Biology II, 2 cr. (See BIOL-306 for description.)

BIOL-308 Workshop in Biology III, 3 cr. (See BIOL-306 for description.)

BIOL-311 Genetics, 3 cr. Introduction to the traditional Mendelian concepts, and to contemporary concepts of heredity and their cytological mechanisms. Lecture and Laboratory. *Prereq.:* six credit hours in general biology, including BIOL-103.

BIOL-312 Evolution, 3 cr. A reading-lecture-discussion course on the facts, theories, and principles of organic evolution. *Prereq.:* six credit hours in general biology (BIOL-103 is recommended).

BIOL-316 Biochemistry, 4 cr. Chemistry and metabolism of carbohydrates, proteins, nucleic acids, lipids, vitamins, and minerals associated with animal and plant life. Lecture and laboratory. *Prereq.:* BIOL-201 and CHEM-231; CHEM-232 recommended.

BIOL-318 General Microbiology, 3 cr. Study of the taxonomy and identification, ultrastructure and function, nutrition and growth, physiology, metabolism, molecular genetics, host microbial interactions, immunobiology, epidemiology, ecology, and biotechnology of microorganisms and viruses. Lecture and laboratory. *Prereq.:* BIOL-201 and three credit hours in general biology.

BIOL-319 Radiation Biology, 4 cr. Somatic and genetic effects of ionizing radiation, use of isotopes as tracers in experiments involving metabolic activities. Lecture and laboratory. *Prereq.:* six credit hours in chemistry; six credit hours in physics; one course in biochemistry or one 300-level physiology course.

BIOL-321 Cytology and Cytogenetics, 3 cr. A survey of cell structure and function with particular emphasis on the role of the nucleus. Topics include cell ultrastructure, chromosome structure, an analysis of cell division, effects of irradiation and chemicals on cells, and the evolution of the karyotype. Lecture and laboratory. *Prereq.:* six credit hours in general biology, including BIOL-103; BIOL-311 recommended.

BIOL-322 Pathogenic Microbiology, 3 cr. Systematic study of the distinctive cellular and molecular properties of pathogenic microorganisms including bacteria, fungi, viruses and protozoans; mechanisms of infection, pathogenesis, host defenses, immunology, epidemiology, diagnosis, treatment and control of these microorganisms. Lecture only. *Prereq.:* BIOL-318.

BIOL-323 Physical Methods in Biology, 3 cr. Principles and practice of physical instrumentation and techniques in the manipulation of biological materials; extraction of biological data and regulation of physical variables; spectrophotometry, chromatography, and electrophoresis, radioactivity detection techniques, cell and tissue fractionation methods. Lecture and laboratory. *Prereq.:* six credit hours in biology including BIOL-201; one year of chemistry and one year of physics.

BIOL-325 History of Science, 3 cr. Development of the scientific method and knowledge of the natural sciences from ancient civilization to the present. Lecture only. *Prereq.:* six credits in the physical sciences and six credits in biological science.

BIOL-326 Biological Geography, 3 cr. Geographic distribution of living organisms and the principles underlying this distribution. Lecture only. *Prereq.:* six credit hours in general biology.

BIOL-327 Immunology, 3 cr. The biological aspects of immunity and the immune response to "not-self" agents. Lecture and laboratory. *Prereq.:* BIOL-ZOOL-312.

BIOL-328 Aquatic Biology, 3 cr. Biological study of selected aquatic ecosystems including biological, chemical and physical parameters of freshwater communities. Field work emphasizes practical experience in specimen collection and identification; laboratory work concentrates on water analysis and includes an introduction to organismic toxicology caused by aquatic pollutants. Lecture and laboratory. *Prereq.:* six credit hours in general biology.

BIOL-331 Ecological Methods, 3 cr. Field and laboratory methodology for the ecologist. Includes instruction on experimental design, quantitative sampling, data acquisition and interpretation as well as the preparation of project reports. *Prereq.:* consent of instructor.

BIOL-332 Internship in Environmental Biology I, 3 cr. Field experience at an off-campus site guided by a faculty advisor and a site supervisor. A minimum of 140 hours at the site is required. The course may be taken after completion of an acceptable course background usually in the senior year. Sites, including zoos, area park districts and nature preserves, laboratories, depending on availability. *Prereq.:* consent of instructor; may be taken concurrently with BIOL-333.

BIOL-333 Internship in Environmental Biology II, 3 cr. See BIOL-332 for description. *Prereq.:* consent of instructor; may be taken concurrently with BIOL-332.

BIOL-335 Introduction to Biotechnology, 3 cr. A survey of the history, theories, and major concepts in the practical applications of the principles of genetics, microbiology, biochemistry, and molecular biology. Medical, agricultural, industrial, and environmental applications of biotechnology and their implications will be emphasized. Lecture only. *Prereq.:* BIOL-311, BIOL-316, BIOL-318 or consent of instructor.

BIOL-391 Independent Study in Biology, 1 cr. A field, laboratory, or library study of a biologically oriented topic.

Prereq.: twelve credit hours in biology at the 200 or 300-level, including at least two field or laboratory courses. These courses should be supportive of the project to be undertaken. Restricted to undergraduates. Departmental consent.

BIOL-392 Independent Study in Biology, 2 cr. (See BIOL-391 for description.)

BIOL-393 Independent Study in Biology, 3 cr. (See BIOL-391 for description.)

BIOL-399 Topics in Biology, 3 cr. Selected course offerings in modern biology. Topics studied differ from term to term. Consult the Schedule of Classes for specific topics.

Prereq.: consent of instructor.

BIOL-401 Analysis of Development, 3 cr. Analysis of mechanisms underlying developmental processes in the embryo and adult organisms with special emphasis on the role of the genes in development. Lecture only. *Prereq.:* graduate standing; BIOL-311, BIOL-ZOOL-311, or BIOL-ZOOL-323.

BIOL-402 Biochemical Genetics, 3 cr. Gene concept and mechanisms of gene action; DNA and genetic coding, code translation, replication, chemical aspects of mutation, gene-protein and gene-enzyme relationships, intracellular integration of gene action. Lecture and laboratory. *Prereq.:* graduate standing; BIOL-311; and BIOL-316.

BIOL-403 Seminars in Biology, 1 cr. Students give an oral presentation on selected topics; two hours per week; course may be repeated up to a maximum of three credits by departmental permission. *Prereq.:* graduate standing.

BIOL-405 Electron Microscopy, 3 cr. Theoretical principles and operational procedures of electron microscopy, interpretation of electron micrographs, and correlation of cell ultrastructure and function. Lecture and laboratory. *Prereq.:* Graduate standing and BIOL-321.

BIOL-406 Physical Biochemistry, 3 cr. Study of the physical and chemical phenomena associated with the metabolism and isolation of important biological compounds; mechanisms involved in the passage of metabolites across biological membranes; release of energy in enzymatic systems; equilibria of important biochemical constituents in uni- and multi-celled organisms; isolation and purification of bio-

logically active compounds. Lecture only. *Prereq.:* graduate standing and BIOL-316; one course in physics recommended.

BIOL-407 Enzymology: Enzyme Structure and Function, 3 cr. Enzymes as protein catalysts; the structure of a biological catalyst as discerned by x-ray diffraction, chemical modification, nuclear magnetic resonance, and kinetic studies is analyzed and related to function. Lecture, demonstration, discussion and laboratory. *Prereq.:* graduate standing and BIOL-316.

BIOL-408 Bio-Environmental Analysis, 3 cr. Individual and group field projects providing experience in techniques appropriate to the analysis of natural communities and their environmental components. Studies include contrasts between selected natural areas and similar ones altered by man. A summary interpretive paper, using data acquired, is required from each student. Lecture, laboratory, and field work. *Prereq.:* graduate standing and BIOL-ZOOL-325, BIOL-BOT-321, or equivalent.

BIOL-409 Ultrastructural Cytology of Protista, 3 cr. Examination of the fine structure and evolutionary interrelationships of the algae, fungi, and protozoa. Lecture only.

Prereq.: graduate standing, BIOL-321 or BIOL-ZOOL-319.

BIOL-410 Advanced Immunology, 3 cr. Contemporary issues in immunochemistry as related to antibody structure and function; lectures and discussion of current papers on antibody structure, the inheritance of immune response capacities, immunological tolerance, and transplantation disease. Lecture and discussion. *Prereq.:* graduate standing, BIOL-311, BIOL-316, and BIOL-327.

BIOL-419 Radiobiology, 4 cr. The use of radioisotopes in biological experiments. Principles of nuclear decay, properties and detection of ionizing radiation. Somatic and genetic effects of radiation at the organismic, cellular, and biochemical levels. Lecture and laboratory. *Prereq.:* graduate standing and six credit hours in chemistry; six credit hours in physics; one course in biochemistry or a 300-level physiology course.

BIOL-420 Metabolism, 3 cr. The fundamental bond-making and bond-breaking processes (intermediary metabolism) enabling living organisms to be produced and maintained; emphasis on the regulations of and reaction mechanisms involved in the "energy flow" associated with intermediary metabolism. Lecture and laboratory. *Prereq.:* graduate standing, minimum of one course in general biochemistry. Coreq. recom: Organic Chemistry II.

BIOL-481 Biological Literature, 3 cr. Preparation of a series of scientific papers based on a literature search. Activities include the research and synthesizing of literature with reference to certain topics. *Prereq.:* graduate standing and at least 18 credit hours in graduate biology.

BIOL-497 Thesis Seminar, 3 cr. Guidance of students writing a library thesis to fulfill requirements for the Master of Science degree in Biology, Option II. *Prereq.:* acceptance to candidacy in the Master of Science Program in Biology, Option II.

BIOL-498 Advanced Topics in Biology, 3 cr. Topics studied differ from term to term. Consult the Schedule of Classes for specific topics. *Prereq.:* graduate standing and consent of instructor.

BIOL-499 Research Thesis, 6 cr. Guidance of students conducting research and writing a thesis to fulfill require-

ments for the Master of Science degree in Biology, Option I.

Prereq.: acceptance to candidacy in the Master of Science in Biology program and approval for experimental/field study thesis.

Botany

BIOL-BOT-101 Plants and People, 3 cr. For the non-science majors. Plants and their impact upon people; foods and agriculture, poisonous plants and medicinal plants, as well as the ecology, genetics and evolution of plants. Lecture and laboratory. (Does not fulfill major or minor requirements in biology.)

BIOL-BOT-311 General Mycology, 3 cr. The fungi, their laboratory cultivation, natural history, morphogenesis, genetics, and physiology. Lecture and laboratory. *Prereq.:* six credits in general biology and BIOL-BOT-318.

BIOL-BOT-312 Economic Botany, 3 cr. Plants of particular economic significance to man as sources of food, fibers, flavoring agents, drugs, industrial chemicals; horticultural plants; the role of economic plants in past and modern society. Lecture only. *Prereq.:* a course in botany or six credits in general biology.

BIOL-BOT-313 Plant Anatomy, 3 cr. The cellular, organismic, and gross structures of the vascular plants; their interrelationships with development and function in time and environment. Lecture and laboratory. *Prereq.:* six credits in general biology.

BIOL-BOT-314 Local Flora, 3 cr. Phylogenetic interpretation derived from plant diversity; the importance of the patterns of contemporary plants from the standpoint of evolution; taxonomic study of local vascular plants. Lecture, laboratory and field work. *Prereq.:* six credits in general biology.

BIOL-BOT-315 Plant Physiology, 4 cr. Physiochemical basis of plant life, emphasizing life processes of major significance to the seed plants. Lecture and laboratory. *Prereq.:* six credits in general biology, including BIOL-201 and one course in organic chemistry.

BIOL-BOT-316 Phycology, 3 cr. Cultivation and laboratory study of the chlorophytes, cyanophytes, chrysophytes, phaeophytes, rhodophytes, and flagellated types of algae; algal cytology, taxonomy, phylogeny, physiology, ecology, and economics. Lecture and laboratory. *Prereq.:* six credits in general biology; BIOL-BOT-318 recommended.

BIOL-BOT-318 General Plant Morphology, 3 cr. Principles of plant morphology illustrated by life histories of representative forms of the major plant groups. Lecture and laboratory. *Prereq.:* six credits in general biology.

BIOL-BOT-321 Plant Ecology, 3 cr. Ecological principles illustrated by environmental and successional relationships in selected plant communities of the Chicago area. Lecture and field work. *Prereq.:* six credits in general biology.

BIOL-BOT-402 Plant Biochemistry, 3 cr. Metabolic pathways of particular importance to plants, such as photosynthesis, the dissemination of starch, nitrogen fixation, and the formation of certain secondary products; metabolic pathways common to plants and other groups of organisms; phytohormonal control. Lecture only. *Prereq.:* graduate standing and BIOL-316.

BIOL-BOT-404 Plant Morphogenesis, 3 cr. Factors determining rate, sequence, and type of biological pattern and structure development as exemplified in plants. Lecture and laboratory. *Prereq.:* graduate standing and BIOL-BOT-315.

Zoology

BIOL-ZOOL-201 Human Genetics, 3 cr. Heredity laws as they relate to humans; nature and origin of genetic similarity and diversity; relationship of genetics to medicine and society. Lecture and discussion. *Prereq.:* BIOL-103

BIOL-ZOOL-202 Anatomy and Physiology, 4 cr. Human anatomy and associated complex functions; emphasis on the muscular, nervous and cardiovascular systems. Lecture, demonstration, and discussion. *Prereq.:* six credit hours in 100-level biology.

BIOL-ZOOL-213 Mammalian Anatomy, 4 cr. Gross architectural elements of the mammalian body, with emphasis upon correlation of form and function. Lecture and laboratory.

Prereq.: six credits in general biology.

BIOL-ZOOL-311 General Embryology, 3 cr. Development of animals, both vertebrate and invertebrate, from the egg to the adult stage. Lecture and laboratory. *Prereq.:* six credits in general biology.

BIOL-ZOOL-312 Vertebrate Physiology, 4 cr. Functions and interrelationships of organ systems. Lecture and laboratory. *Prereq.:* BIOL-102 and BIOL-201.

BIOL-ZOOL-313 Entomology, 3 cr. Insects, their identification, classification, habits, and ecological relationships, with special emphasis on those common to the Chicago area. Lecture, laboratory, and field work. *Prereq.:* six credits in general biology.

BIOL-ZOOL-314 Ornithology, 3 cr. Birds, their identification, classification, habits, ecological relationships, and conservation, with special emphasis on those indigenous to the Chicago area. Lecture, laboratory, and field work. *Prereq.:* six credits in general biology.

BIOL-ZOOL-315 Invertebrate Zoology, 3 cr. Taxonomy and comparative morphology of the major phyla of invertebrates; life histories of representative forms. Lecture and laboratory. *Prereq.:* six credits in general biology.

BIOL-ZOOL-316 Animal Behavior, 3 cr. Comparative ethology in the animal kingdom and its adaptive significance based upon the evolution of form and function of the nervous system, sense organs and effector organs; topics include instinct, learning, intelligence, social organization, and their physiological integrating mechanisms. Lecture only. *Prereq.:* six credits in general biology.

BIOL-ZOOL-317 Animal Parasitology, 3 cr. Taxonomy, anatomy, physiology, and significance of parasitic animals; host-parasite interactions; distribution of parasites throughout the world; examination of their life cycles, and prophylaxis and therapy of parasitic infections. Lecture and laboratory.

Prereq.: six credits in general biology and BIOL-ZOOL-326.

BIOL-ZOOL-318 Vertebrate Histology, 3 cr. The microscopic anatomy of adult mammalian cells, tissues, and organs. Lecture and laboratory. *Prereq.:* six credits in general biology, including BIOL-102.

BIOL-ZOOL-319 Protozoology, 3 cr. General treatment of protozoa covering microscopic anatomy and ultrastructure, natural history, morphogenesis, and protozoan genetics and physiology. Lecture and laboratory. *Prereq.:* six credits in general biology.

BIOL-ZOOL-323 Developmental Anatomy, 4 cr. Phylogenetic study of the embryology and adult anatomy of the vertebrates. The course combines the traditionally separate courses in comparative vertebrate anatomy and embryology. Lecture and laboratory. *Prereq.:* nine credits in biology, including BIOL-ZOOL-326 or a course in general zoology.

BIOL-ZOOL-324 Endocrinology, 3 cr. Certain glandular secretions and neurosecretions; the hormones and their function in maintaining homeostasis in the vertebrates; current research on hormone action; minor reference to invertebrate hormones. Lecture and laboratory. *Prereq.:* BIOL-201 and BIOL-ZOOL-312.

BIOL-ZOOL-325 Animal Ecology, 3 cr. Basic principles of the interrelationships between animals and their environment; the current danger of disturbing balances in nature by environmental contamination. Lecture, laboratory, and field work. *Prereq.:* six credit hours in general biology.

BIOL-ZOOL-326 Animal Kingdom, 3 cr. Anatomy, physiology, classification, and phylogeny of animals. Lecture and laboratory. *Prereq.:* six credits in 100-level biology.

BIOL-ZOOL-327 Local Fauna, 3 cr. Taxonomy and field identification characteristics of local animal groups with emphasis on collecting organisms in selected ecosystems in the region. Both major invertebrate and vertebrate taxa are surveyed; organisms collected in the field are studied in the laboratory. Students prepare a collection of labelled organisms. Lecture, laboratory, and field work. *Prereq.:* six credits in biology.

BIOL-ZOOL-328 Animal Physiology, 3 cr. Study of physiological adaptations of animals to their environment. Both invertebrates and vertebrates are discussed in regard to ecological and evolutionary factors. Laboratory exercises illustrate basic principles of animal physiology and behavior.

Prereq.: six hours of general biology.

BIOL-ZOOL-329 Neurobiology, 3 cr. (formerly BIOL-ZOOL 403). General consideration of nervous system in vertebrates and invertebrates. Excitable membrane physiology, synaptic mechanisms, and neuronal organization with emphasis on the integrative aspects of neural function. Lecture and laboratory. *Prereq.:* six hours of chemistry, four hours of physics, and BIOL-ZOOL-312.

BIOL-ZOOL-401 Vertebrate Osteology, 3 cr. Microscopic anatomy, macroscopic anatomy, physiology, and biomechanics of the vertebrate skeleton in phylogeny and ontogeny. Lecture. *Prereq.:* graduate standing; BIOL-ZOOL-318 or consent of instructor.

BIOL-ZOOL-402 Comparative Animal Physiology, 3 cr. Physiological and biochemical evolution of animals with emphasis on the range and variety of physiological mechanisms and processes involved in adaptations to special habits and habitats. Lecture and laboratory. *Prereq.:* graduate standing, BIOL-ZOOL-312, BIOL-ZOOL-326, or equivalent.

BIOL-ZOOL-404 Advanced Vertebrate Physiology, 3 cr. In-depth consideration of physiology of main vertebrate organ systems; emphasis on cardiovascular and renal physiology. Lecture and laboratory. *Prereq.:* graduate standing and BIOL-ZOOL-312.

CHEMISTRY

Sargon John Al-Bazi, Ph.D., Assistant Professor
Veronica A. Curtis-Palmer, Ph.D., Associate Professor
Frank W. Dobbs, Ph.D., Professor
Howard Murray, Ph.D., Professor
Paul Poskozim, Ph.D., Professor
Wayne Svoboda, M.S., Associate Professor
James A. Yonan, Ph.D., Assistant Professor

Chemistry is a physical science with far reaching applications that touch virtually every aspect of our day-to-day existence. Careers in chemistry offer numerous possibilities in a wide range of industries.

The Department of Chemistry offers courses leading to the degrees of Bachelor of Science and Master of Science. The undergraduate curriculum prepares students for careers in industry and secondary school teaching as well as for graduate study. Undergraduate courses are also designed to provide a general background for students planning careers in nursing and other allied health fields.

In 1985, Northeastern Illinois University was added to the American Chemical Society's Approved List of baccalaureate chemistry programs in colleges and universities. Being included on the Approved List means that the chemistry curriculum meets standards established by the A.C.S. Committee on Professional Training. Students completing the A.C.S. track will earn a certificate stating that they have met A.C.S. standards for professional training.

Transfer students majoring in chemistry need to contact a department advisor immediately so that transfer credits may be evaluated and an appropriate program of study planned. Transfer students must complete a minimum of twelve credit hours of chemistry at Northeastern Illinois University to be eligible for a degree.

Transfer students minoring in chemistry must complete a minimum of two courses in chemistry at Northeastern Illinois University.

UNDERGRADUATE PROGRAMS

Chemistry courses are designed to be taken in sequence. Students will not be permitted to register for courses if they do not have credit for the required prerequisites. No exceptions will be made.

Major in Chemistry for the Bachelor of Science Degree

Required Courses:

CHEM-211	General Chemistry I	5 cr.
CHEM-212	General Chemistry II	4 cr.
CHEM-213	Quantitative Analysis	5 cr.
CHEM-231	Organic Chemistry I	4 cr.
CHEM-232	Organic Chemistry II	4 cr.

CHEM-311	Physical Chemistry I	4 cr.
CHEM-312	Physical Chemistry II	4 cr.
CHEM-330	Instrumental Analysis: Spectroscopy or CHEM-331 Instrumental Analysis: Quantitative Methods	4 cr.

Two electives chosen from the following:	6-8 cr.
CHEM-316 Inorganic Chemistry	3 cr.
CHEM-318 Industrial Chemistry	3 cr.
*CHEM-328 History of Chemistry	3 cr.
**CHEM-330 Instrumental Analysis:	
Spectroscopy	4 cr.
**CHEM-331 Instrumental Analysis:	
Quantitative Methods	4 cr.
CHEM-332 Identification of Organic	
Compounds	4 cr.
CHEM-346 Radiochemistry	4 cr.
CHEM-347 Advanced Organic Chemistry:	
Polyfunctional Compounds	3 cr.
CHEM-348 Advanced Organic Chemistry:	
Bio-Organic Compounds	3 cr.
Any other 300-level chemistry course approved by the department.	

*Major elective credit is given **only** to students seeking certification for teaching chemistry in secondary schools.

**Major elective credit is given only if the course is not used to count towards the required courses in the major.

Required Courses in a Related Field:

MATH-107	Calculus I	4 cr.
MATH-202	Calculus II	4 cr.
PHYS-203	Physics I Laboratory	1 cr.
PHYS-204	Physics II Laboratory	1 cr.
PHYS-206	Physics with Calculus I or PHYS-201 College Physics I	3 cr.
PHYS-207	Physics with Calculus II or PHYS-202 College Physics II	3 cr.
Total	16 cr.	

Students wishing to be certified for teaching chemistry in secondary schools should consult the Secondary Education section of this catalog.

American Chemical Society approved program in Chemistry:

Graduating majors may receive a certificate stating that they have completed a program which meets the A.C.S. standards for Professional Training if they fulfill the following requirements:

take PHYS-206 as prerequisite for CHEM-311
take PHYS-207 as prerequisite for CHEM-312
take CHEM-311 and CHEM-312 during the junior year
CHEM-316, CHEM-330, CHEM-331, and CHEM-347 must be included in the coursework.

have a minimum grade point average of 3.0 (on a 4.0 scale) in all chemistry courses and no grade below "C".

Completion of this program requires a minimum of 45 cr.

Minor in Chemistry (22 cr. hrs.)

CHEM-211	General Chemistry I	5 cr.
CHEM-212	General Chemistry II	4 cr.
CHEM-213	Quantitative Analysis	5 cr.
CHEM-231	Organic Chemistry I	4 cr.
CHEM-232	Organic Chemistry II	4 cr.
Total	22 cr.	

Substitutions require written departmental approval.

A grade of "C" or better is required in all chemistry courses counted toward the minor.

GRADUATE PROGRAM

Master of Science in Chemistry

This program provides graduate education for students planning careers in industry, business, teaching or additional graduate or professional study. Advanced courses in major areas of chemistry are offered as well as opportunities for supervised research.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Full admission to the program requires at least a 3.0 (B) average in the following prerequisite undergraduate courses: (a) two semesters of general chemistry, two semesters of organic chemistry, two semesters of physical chemistry, and one semester of analytical chemistry (all of these must include laboratory); (b) two semesters (normally eight credit hours) of physics including laboratory; and (c) two semesters (normally eight credit hours) or calculus.

Conditional admission to the program may be granted when a student has a marginal undergraduate record or a deficiency in prerequisite undergraduate courses. All conditions must be fulfilled for candidacy (see below).

Requirements for the Degree:

1. The student must earn a 3.0 (on a 4.0 scale) grade point average in all chemistry courses. This is in addition to the 3.0 grade point average for all graduate courses required by the Graduate College.

2. **Course Work:** (30 credit hours)
A total of 30 credit hours must be earned. The majority of students take approximately ten formal courses. Options are available to earn credit hours for research, independent study and thesis work (see below).

The following courses must be taken as part of the program

if they have not been previously taken as part of an undergraduate program:

CHEM-316 Inorganic Chemistry	3 cr.
and	
CHEM-330 Instrumental Analysis:	
Spectroscopy	4 cr.
or	
CHEM-331 Instrumental Analysis:	
Quantitative Methods	4 cr.

A minimum of one course must be taken in each of the following areas:

Inorganic

CHEM-402 Organometallic Chemistry	3 cr.
CHEM-406 Coordination Chemistry	3 cr.
CHEM-413 Modern Inorganic Chemistry	3 cr.

Organic

CHEM-332 Identification of Organic Compounds	4 cr.
CHEM-347 Advanced Organic Chemistry:	
Polyfunctional Compounds	3 cr.
CHEM-348 Advanced Organic Chemistry:	
Bio-organic Compounds	3 cr.
CHEM-401 Carbohydrates	3 cr.
CHEM-403 Physical Methods in Organic Chemistry	3 cr.
CHEM-411 Organic Reaction Mechanisms	3 cr.

Physical

CHEM-346 Radiochemistry	3 cr.
CHEM-404 Chemical Thermodynamics	3 cr.
CHEM-405 Quantum Chemistry	3 cr.
CHEM-407 Symmetry in Chemistry	3 cr.

In addition to the above, selected topics courses (CHEM-420 and CHEM-306) are offered from time to time. Industrial Chemistry (CHEM-318) is designed for those interested in careers in the chemical industry.

Please consult with the graduate advisor when planning courses and schedules.

The majority of course work applied to the master's degree must be at the 400-level.

A maximum of six credit hours may be taken in related fields with the approval of the department.

A maximum of nine credit hours of transfer credit may be accepted with the approval of the department and the Graduate College.

3. Candidacy: Upon completion of 12 credit hours, formal application for candidacy must be filed with the Graduate College. Conditional admissions are reviewed at this time and grade point averages must be 3.0 (B) or higher. In addition, the department requires satisfactory performance on the Graduate Record Exam in chemistry. Test results must be submitted directly to the Graduate College by the Graduate Record Examination Educational Testing Service. Consult the graduate advisor for test dates and related

information. Graduate record exams are offered five times a year from October through June. Candidacy is required for continued progress in the Master of Science program in Chemistry. It is a prerequisite for research and thesis work.

4. Research and Thesis Work: Students wishing to do laboratory or library research or write a thesis, may do so under the following conditions:

- acceptance for candidacy;
- attainment of at least a 3.25 (on a 4.0 scale) grade point average;
- acceptance by a research or thesis advisor.

Credit for three or six hours of research may be granted through Independent Study (CHEM-408). Individual arrangements are made between the student and the research advisor.

Thesis work usually requires a full-time commitment for one or more terms. A maximum of 12 credit hours (6 credit hours each in CHEM-408 Independent Study and CHEM-409 Thesis Seminar: Chemistry) may be granted for formal thesis work.

5. Merit Tuition Waivers and Assistantships: The Department of Chemistry is regularly allotted Merit Tuition Waivers to defray the cost of tuition for graduate students. To be eligible, students must have at least a 3.0 (on a 4.0 scale) grade point average and must have taken at least three courses in the master of science program.

Students wishing to pursue their master of science degree on a full-time basis may occasionally do so with modest support from the University in the form of an assistantship. To be eligible for an assistantship the student must have completed at least two terms at the University and have a grade point average of at least 3.25 (on a 4.0 scale).

6. Final Examination: A final examination is required of all students. To be eligible, a student must have candidacy and have successfully completed at least 20 credit hours. Final exams are normally offered twice each year.

7. Students with Foreign Credentials: Students with foreign credentials should check with the Graduate College regarding transcript evaluation and English language testing. Since this is often a lengthy process, it is advisable for the international student with residency status to begin taking graduate courses in chemistry as a student-at-large while waiting for official word on admission. Consult the graduate advisor.

COURSE OFFERINGS

CHEM-101 Chemistry and the Environment, 3 cr. Introduction to chemistry, with emphasis on the relationship of chemistry to the creation and solution of environmental problems.

CHEM-102 The Chemistry of Drugs, 3 cr. Introduction to chemistry through a study of drugs. Drug action and mechanisms are discussed on the basis of atomic, molecu-

lar, and cellular structure. Licit and illicit drugs, medicines, and food and food-related products are included.

CHEM-103 Chemistry and the Consumer, 3 cr. Introduction to chemistry based on the study of some of the processes and materials which chemistry contributes to our civilization. Elementary chemical principles are used to explain the behavior of synthetic polymers, toxic substances, food additives, cleaning products, and other chemically manufactured materials.

CHEM-105 Chemistry of the Universe, 3 cr. Introduction to chemistry based on a study of the universe; the chemical nature of the universe, the position of the planet Earth therein, and the chemical origin of life.

CHEM-110 Chemical Concepts, 3 cr. Survey course in chemistry designed for the non-science major including such topics as the historical development of chemistry, atomic theory, solution chemistry, organic, and biochemistry. Lecture and laboratory.

CHEM-200 Introduction to General Chemistry, 3 cr. Basic principles of chemistry with particular emphasis on solving simple numerical problems and writing and balancing chemical equations; especially for students planning to take CHEM-211.

CHEM-211 General Chemistry I, 5 cr. Introduction to general inorganic chemistry, including stoichiometry, concentration units, gas laws, atomic structure, bonding, periodic laws, states of matter, solutions, acid-base theories, rate, equilibrium, and oxidation-reduction theory. Lecture and laboratory. *Prereq.:* minimum math placement exam score of 27 or satisfactory completion of MATH-102.

CHEM-212 General Chemistry II, 4 cr. Continuation of General Chemistry I with emphasis on reaction rates, equilibria in aqueous solutions, thermochemistry, oxidation-reduction reactions, and the methods of qualitative analysis. Lecture and laboratory. *Prereq.:* CHEM-211.

CHEM-213 Quantitative Analysis, 5 cr. Statistical analysis of data, chemical equilibrium, simultaneous equilibria, classical and non-classical gravimetric and volumetric techniques, acid-base and oxidation-reduction reactions, spectrophotometric and potentiometric measurements. *Prereq.:* CHEM-212. Registration by consent of instructor only.

CHEM-220 Selected Topics in Chemistry, 3 cr. Topics of current interest for students without special science background. Consult the Schedule of Classes for specific topics.

CHEM-231 Organic Chemistry I, 4 cr. Study of the structure, properties, reaction mechanisms, and nomenclature of aliphatic and aromatic hydrocarbons and their derivatives. Lecture and laboratory. *Prereq.:* CHEM-211.

CHEM-232 Organic Chemistry II, 4 cr. Continuation of CHEM-231. A study of the structure, properties, reaction mechanisms, synthesis, and infrared and nuclear magnetic resonance spectroscopy of the alcohols, acids, amines, and other monofunctional compounds. Lecture and laboratory. *Prereq.:* CHEM-231.

CHEM-305 Independent Study in Chemistry, 3 cr. An introduction to original chemical research under faculty supervision. *Prereq.:* junior standing and consent of instructor.

CHEM-306 Selected Topics in Chemistry, 3 cr. Topics of current interest for students who have junior standing in chemistry. Consult the Schedule of Classes for specific topics. *Prereq.:* CHEM-232; junior standing.

CHEM-311 Physical Chemistry I, 4 cr. Theoretical and experimental study of the structure and properties of matter, including the gaseous state, chemical thermodynamics, chemical equilibrium, liquids and phase equilibria, solutions of nonelectrolytes and ionic solutions. Lecture and laboratory.

Prereq.: CHEM-213, CHEM-232, MATH-107, PHYS-203, PHYS-201 or PHYS-206. It is strongly suggested that the student have completed a year of physics with laboratory.

CHEM-312 Physical Chemistry II, 4 cr. Continuation of CHEM-311, including the kinetic-molecular theory, transport properties, chemical kinetics, statistical mechanics, quantum theory, atoms and diatomic molecules, and spectroscopy. Lecture and laboratory. *Prereq.:* CHEM-311, MATH-202, PHYS-204, and PHYS-202 or PHYS-207.

CHEM-316 Inorganic Chemistry, 3 cr. A thorough study of bonding in non-transition and transition elements, periodic trends and tendencies, structural relationships, and mechanisms of inorganic reactions. *Prereq.:* CHEM-232.

CHEM-317 Experimental Inorganic Chemistry, 1 cr. Preparation and characterization of inorganic compounds, particularly transition metal complexes. Laboratory only. *Prereq.:* CHEM-232 and CHEM-316 (credit or co-registration).

CHEM-318 Industrial Chemistry, 3 cr. A study of the industrial aspects of chemistry, including economics, design and operation of process equipment, and a study of a variety of chemical industries. *Prereq.:* CHEM-231.

CHEM-326 Chemical Literature, 2 cr. Introduction to library research in chemistry, and preparation of a review paper in some current field of chemistry. *Prereq.:* one 300-level course in chemistry.

CHEM-328 History of Chemistry, 3 cr. Study of the history of chemistry, with emphasis on the development of fundamental concepts. *Prereq.:* three 200-level chemistry courses.

CHEM-330 Instrumental Analysis: Spectroscopy, 4 cr. Intensive laboratory introduction to infrared and Raman spectroscopy, ultraviolet and visible spectroscopy, mass spectroscopy, and nuclear magnetic resonance spectroscopy, and the qualitative, quantitative, and research aspects associated with them. Lecture and laboratory. *Prereq.:* CHEM-213, CHEM-232 and consent of instructor.

CHEM-331 Instrumental Analysis: Quantitative Methods, 4 cr. Introduction to the theory and practice of instrumental methods used to determine composition of materials, including gas and liquid chromatography, atomic absorption and emission, X-ray diffraction and fluorescence, and potentiometry. Lecture and laboratory. *Prereq.:* CHEM-213, CHEM-231 and consent of instructor.

CHEM-332 Identification of Organic Compounds, 4 cr. Chemical, physical, and spectroscopic methods and their use in the separation, purification, and identification of organic compounds. Lecture and laboratory. *Prereq.:* CHEM-213 and CHEM-232.

CHEM-346 Radiochemistry, 4 cr. Natural and artificial radioactivity, sources, preparations and properties of radia-

tion including measurement of radiation and the use of radioactive isotopes. Lecture and laboratory. *Prereq.:* CHEM-213 and MATH-107.

CHEM-347 Advanced Organic Chemistry: Polyfunctional Compounds, 3 cr. Chemistry of polyfunctional compounds, condensed aromatic and heterocyclic systems, electrocyclic reactions and molecular rearrangements. *Prereq.:* CHEM-232.

CHEM-348 Advanced Organic Chemistry: Bioorganic Compounds, 3 cr. The chemistry of complex molecules such as proteins, nucleic acids, and carbohydrates is studied from the point of view of their physical properties, and their reaction, synthesis, and structure-function relationships. *Prereq.:* CHEM-232.

CHEM-357 Chemical Kinetics, 3 cr. The study and evaluation of various theories of reaction rates and mechanisms of chemical reactions. *Prereq.:* CHEM-311.

CHEM-365 Field Experience in Chemistry I, 6 cr. Experience in chemistry in an off-campus location, e.g. business or government. The student registering selects well-defined academic goals to be achieved. These goals will be selected in cooperation with an on-campus advisor. *Prereq.:* consent of instructor.

CHEM-366 Field Experience in Chemistry II, 6 cr. Continuation of CHEM-365.

CHEM-401 Carbohydrates, 3 cr. Structure, stereochemistry, and reactions of monosaccharides, disaccharides, oligosaccharides, and polysaccharides. *Prereq.:* graduate standing and CHEM-312.

CHEM-402 Organometallic Chemistry, 3 cr. The metal-carbon bond including organometallic synthesis, structure, reaction mechanisms, and thermodynamics. Main group metal-carbon compounds, transition metal-carbon compounds, and such special topics as Grignard compounds, ferrocenes, carbonyl complexes, and inorganic multiple bonding. *Prereq.:* graduate standing, CHEM-312 and CHEM-316.

CHEM-403 Physical Methods of Organic Chemistry, 3 cr. Various physical techniques of interest to the organic chemist, including the several spectroscopic methods, diffusion, molecular weight determination, and dipole moments with emphasis on interpreting the combined data. *Prereq.:* graduate standing and CHEM-312.

CHEM-404 Chemical Thermodynamics, 3 cr. Principles of thermodynamics and their application to chemical problems with particular emphasis on partial molal qualities, the chemical potential, and the thermodynamics of chemical equilibria. *Prereq.:* graduate standing and CHEM-312.

CHEM-405 Quantum Chemistry, 3 cr. Application of quantum mechanics to chemistry. Topics include the Schrodinger equation and simple applications, the postulates and general principles of quantum mechanics, the harmonic oscillator, three-dimensional systems, atoms and molecules, and molecular spectroscopy. *Prereq.:* graduate standing and CHEM-312.

CHEM-406 Coordination Chemistry, 3 cr. Scope of transition metal coordination complexes, coordination number and structure, ligand types, isomerization, complex stability, bonding, reaction mechanisms, magnetic moments. *Prereq.:* graduate standing, CHEM-316 and CHEM-312.

CHEM-407 Symmetry in Chemistry, 3 cr. Introduction to those aspects of group theory and symmetry which are particularly relevant to chemistry including point groups, molecular vibrations, hybrid orbitals, and crystal field theory. *Prereq.:* graduate standing and CHEM-312 or PHYS-336.

CHEM-408 Independent Study in Chemistry, 3 cr. Research in a particular area of chemistry under faculty supervision. *Prereq.:* graduate standing and consent of instructor.

CHEM-409 Thesis Seminar: Chemistry, 6 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Science degree in Chemistry. *Prereq.:* acceptance to master's degree candidacy in chemistry and invitation by the department to prepare a research thesis.

CHEM-411 Organic Reaction Mechanisms, 3 cr. Reaction pathways in organic chemistry including isotope effects, linear free energy, stereochemistry, configurational analysis, and pericyclic reactions. *Prereq.:* graduate standing and CHEM-312.

CHEM-412 Reaction Kinetics, 3 cr. Methods of studying reaction rates and mechanisms, derivation of mechanisms from rate laws. Theories of unimolecular and bimolecular reactions, and chain mechanisms and appropriate mathematical analysis. Lecture only. *Prereq.:* graduate standing and CHEM-312.

CHEM-413 Modern Inorganic Chemistry, 3 cr. In-depth survey of modern developments in inorganic chemistry, including noble gas chemistry, multiple bonding in coordination complexes, unusual oxidation states of elements, template reactions, inorganic polymers, and inorganic catalysis. *Prereq.:* graduate standing and CHEM-316.

CHEM-420 Selected Topics in Chemistry, 3 cr. Topics of current interest. Consult the Schedule of Classes for specific topics. *Prereq.:* graduate standing.

CHEM-430 Fourier Transform Spectroscopy, 3 cr. Advanced course dealing with primarily NMR and IR. Major topics include theory, hardware, software and practical applications of FT spectrometers. *Prereq.:* graduate standing, CHEM-312, and CHEM-330 or consent of instructor.

COMPUTER SCIENCE

William Barnes, Ph.D., Professor
Louis Becker, Ph.D., Professor
Netiva Caftori, M.S., Assistant Professor
Miroslava Carlson, M.S., Assistant Professor, Chairperson
James Foster, M.S., Assistant Professor
Christine Georgakis, M.S., Assistant Professor
Mohammed Haque, Ph.D., Associate Professor
Heung Kim, Ph.D., Assistant Professor
Donald LaBudde, Ph.D., Professor
Susan Marcus, M.S., Assistant Professor
Kumarss Naimipour, M.S., Assistant Professor
Richard Neapolitan, Ph.D., Professor
Norman Noerper, M.B.A., Assistant Professor
Victor Pellegrini, Ph.D., Professor

The primary goal of the Department of Computer Science is to provide individuals with a broad-based theoretical and

practical understanding of Computer Science. Students who complete the program are prepared to assume positions which include applications programmer, systems programmer, systems analyst and software engineer. In addition, students who complete the undergraduate degree are prepared to enter a graduate program in Computer Science.

The Department of Computer Science offers courses leading to the degrees of Bachelor of Science in Computer Science and Master of Science in Computer Science.

The undergraduate curriculum offered by the Department of Computer Science is designed to serve these purposes: to offer an undergraduate major program in computer science for persons who wish to pursue a career in this field; to offer a minor in computer science for students who feel the need for a less extensive concentration in computing techniques, and to serve students in other academic disciplines by offering instruction in computer applications useful in the areas of specialization.

The Department offers an undergraduate major with three choices of emphasis. In each area of emphasis, students are guided through a carefully selected sequence of courses designed to provide a thorough grounding in practical aspects of the field. Students will also acquire enough theoretical background to enable them to keep up with the rapid changes in computer technology. With carefully chosen major electives, anyone of the three tracks can be used as preparation for graduate school. Students should consult a Department advisor to determine which track and electives to choose.

UNDERGRADUATE PROGRAMS

General Requirements:

During their first term, transfer students should have all transferred Computer Science courses evaluated by the Department of Computer Science for possible acceptance toward major or minor requirements. Acceptance of credit by the University does not guarantee acceptance by the Department.

In order to register for any Computer Science course, except CS-100, students must obtain special permission from the Department advisor.

No student may register for more than three (3), Computer Science courses during any 16 week term.

For further details, contact the Department.

Major in Computer Science for the Bachelor of Science Degree

To declare a major in Computer Science, a student must:

1. Complete CS-200 Programming I with a grade of "C" or better. (Students who took INSC-101 Introduction to Computer Science at Northeastern Illinois University, prior to January 1990 have met this requirement.)

2. Fill out the "Assignment to Major Form" available in the Department office.

Students must complete the major requirements in effect when the declaration of major is accepted by the Department. Students should obtain a Computer Science Major handbook in order to be aware of any changes in requirements.

Major Requirements:

Thirty-six credit hours of computer science course work including at least 24 credit hours of 300-level courses. Transfer students must complete a minimum of 15 credit hours of 300-level Computer Science courses at Northeastern and meet all major requirements.

Students who intend to pursue an advanced degree in Computer Science should plan on completing Calculus II and should consider taking courses in Discrete Structures and Linear Algebra.

Required Core Courses:

CS-200	Programming I	3 cr.
CS-207	Programming II	3 cr.
CS-304	Data Structures	3 cr.
CS-205	IBM 360/370 Assembler Programming	3 cr.
		Total 12 cr.

NO SUBSTITUTIONS ARE ALLOWED FOR CS CORE COURSES.

Emphasis I: BUSINESS DATA PROCESSING

This track is designed primarily for students interested in applications programming.

Required Courses:

CS-202	COBOL Programming	3 cr.
CS-308	Operating Systems	3 cr.
CS-312	Advanced COBOL Programming	3 cr.
CS-315	Data Base Management	3 cr.
CS-316	Introduction to Systems Analysis	3 cr.
CS-318	JCL and Service Programs	3 cr.
Two CS	300-level electives, approved by the CS Department	6 cr.
		CS Core Courses 12 cr.
		Total 36 cr.

CS-201 (Discrete Structures) may be substituted for one 300-level elective.

Emphasis II: SYSTEMS PROGRAMMING

This track is designed primarily for students interested in working with technical support systems.

Required Courses:

CS-202	COBOL Programming	3 cr.
CS-302	Systems Programming	3 cr.
CS-306	Advanced Assembler Programming	3 cr.

CS-307	Programming Languages	3 cr.
CS-308	Operating Systems	3 cr.
CS-309	Compiler Theory	3 cr.
CS-333	UNIX System and C Programming	3 cr.
Select one of the following:		3 cr.
CS-315	Database Management	3 cr.
CS-318	JCL and Service Programs	3 cr.
CS-330	Telecommunications	3 cr.
CS-335	Artificial Intelligence	3 cr.
CS-350	Advanced Discrete Structures	3 cr.
CS core courses		12 cr.
Total		36 cr.

Emphasis III: COMPUTER SCIENCE

This track is designed primarily for students intending to pursue an advanced degree in Computer Science.

Required Courses:

CS-201	Discrete Structures	3 cr.
CS-302	Systems Programming	3 cr.
CS-307	Programming Languages	3 cr.
CS-308	Operating Systems	3 cr.
CS-309	Compiler Theory	3 cr.
CS-333	UNIX System and C Programming	3 cr.
CS-335	Artificial Intelligence	3 cr.
Select one of the following:		3 cr.
CS-305	Computer Logic and Circuitry	3 cr.
CS-313	Quantitative Methods and Computer Use	3 cr.
CS-315	Database Management	3 cr.
CS-326	Computer Use for Numerical Methods	3 cr.
CS-330	Telecommunications	3 cr.
CS-350	Advanced Discrete Structures	3 cr.
CS core courses		12 cr.
TOTAL		36 cr.

Minor in Computer Science (18 cr. hrs.)

A student may complete a minor in Computer Science by selecting courses totaling at least 18 hours from those offered by the Department of Computer Science including at least 6 credit hours of 300-level courses. Transfer students must complete a minimum of 9 credit hours toward a minor at Northeastern.

The courses must be chosen in consultation with the Department advisor or chairperson.

GRADUATE PROGRAM

Master of Science in Computer Science

The graduate program provides education for individuals in the field of computer science and data processing who wish to gain further computer sophistication in order to advance their careers. Advanced courses are offered in many areas of current interest such as artificial intelligence and telecommunications.

The program is designed especially for the convenience of the part-time student; courses are scheduled in the evening and on Saturday.

Requirements for Admission to the Program:

Students must satisfy all requirements for admission to the Graduate College.

Full admission to the program requires a four year degree from an accredited undergraduate college, with an overall undergraduate grade point average of not less than 2.75 (on a 4.0 scale). In addition, students must (1) have taken the equivalent of the following CS undergraduate courses: 101, 207, 304 and 308, and have received an average grade of "B" in these courses; (2) prove mastery of two higher level computer languages such as IBM 360/370 assembler, Digital Equipment VAX assembler, or a personal computer assembler. These masteries may be demonstrated by course work, work experience or by departmental examination; and (3) have completed a course in discrete mathematics. CS-201 (Discrete Structures) satisfies this requirement.

Students lacking any of the above requirements may be given permission to register as students at large while they remove the deficiencies. In some cases students may receive conditional admission to the program.

Requirements for the Degree:

The Master's Degree in Computer Science requires 36 credit hours of course work, 27 of which must be earned at Northeastern Illinois University. The remaining 9 may represent courses taken at accredited institutions with graduate programs in computer science and in conformance with the rules of the Graduate College. The 36 hours will be made up of 15 CS core course hours plus 21 hours of CS electives to be decided on by the student and the graduate advisor. In addition to 350, no more than 12 hours of 300 level courses may be selected to satisfy course requirements for the Master's Degree. Courses taken to remove deficiencies will **not** be counted toward the 36 hours of course work required for the Master's Degree. Courses taken to satisfy undergraduate degree requirements can **not** be used toward the Master's Degree.

In addition, students are required either to complete a Master's Computer Science Thesis Project or to pass a Master's Computer Science Competency Examination, designed by the Department. The choice will be agreed upon by the student and the graduate advisor.

Required Core Courses:

CS-350	Advanced Discrete Structures	3 cr.
CS-401	Software Engineering	3 cr.
CS-402	Advanced Systems Programming	3 cr.
CS-404	Analysis of Algorithms	3 cr.
CS-409	Topics in Compiler Theory	3 cr.
		15 cr.

Elective Courses:

CS-303	Basic Concepts in CAI	3 cr.
CS-307	Programming Languages	3 cr.
CS-326	Numerical Methods	3 cr.
CS-330	Telecommunications	3 cr.
CS-335	Artificial Intelligence	3 cr.
CS-408	Advanced Operating Systems	3 cr.
CS-415	Design of Data Bases	3 cr.
CS-426	Advanced Numerical Methods	3 cr.
CS-430	Queueing Theory in Communic. Networks	3 cr.
CS-431	Digital Telephony	3 cr.
CS-435	Expert Systems	3 cr.
CS-440	Computer Graphics	3 cr.
CS-442	Topics in Network Design	3 cr.
CS-450	Advanced Computer Architecture	3 cr.
CS-460	Computer Security	3 cr.
CS-470	Pattern Recognition	3 cr.
CS-490	Master's Thesis Project	3 cr.
CS-499	Independent Study	3 cr.

The electives should be selected in consultation with the graduate advisor, from the above list depending on the concentration chosen. The department offers four concentrations:

Software Engineering/Systems Programming
MIS
Artificial Intelligence
Telecommunications

Upon completion of 12 hours of graduate course work toward the satisfaction of the course requirements for the Master's Degree, students must formally apply for candidacy. The form should be filed with the Graduate College. Conditional admissions are reviewed at this time and grades must average "B" or better.

For more information, students should obtain a Computer Science Graduate Handbook.

COURSE OFFERINGS

CS-100 Introduction to Personal Computing, 3 cr.

This course provides the student with a general introduction to computers and their usage in today's society. Topics included are: History of Computing, Computer Hardware and Software and Programming in BASIC. Students will become experienced in using personal computers. **Prereq.:** None. (Course not applicable to CS Major or Minor.)

CS-200 Programming I, 3 cr. This is a preparatory course for students who wish to pursue further work in Computer Science. It provides an introduction to the basic concepts of a computer system and the principles of computer programming. Students will get extensive programming experience using microcomputers. A number of programming projects will be assigned involving numeric computations, character manipulation and fundamental constructs of the high-level programming language Pascal. **Prereq.:** MATH-104, or MATH-106, or MATH-110, or higher level math.

CS-201 Discrete Structures, 3 cr. Introduction to the fundamental number theoretic, logical, algorithmic, combinatoric, and computational concepts from discrete structures and their applications to computer science. This course involves no programming. **Prereq.:** CS-200 and MATH-104.

CS-202 COBOL Programming, 3 cr. Introduction to the COBOL Programming language, emphasizing business applications. Students will flowchart, program and test several typical business problems on the computer. **Prereq.:** CS-200.

CS-203 PL/1 Programming, 3 cr. A survey of the general-purpose language PL/1 for applications in commercial, scientific, and systems programming, with an emphasis on optimal solutions of business problems. The student will write and debug several typical problems. **Prereq.:** CS-200.

CS-204 FORTRAN Programming, 3 cr. An in-depth study of FORTRAN programming language, emphasizing mathematics, science, and statistical applications. The student studies methods of problem solving and writes FORTRAN programs for testing on the computer. **Prereq.:** MATH 104.

CS-205 IBM 360/370 Assembler Language Programming, 3 cr. Included are IBM 360/370 architecture and memory layout, instruction sets, data formats, subroutine linkage, macros and debugging. Students will write programs for the IBM 370. **Prereq.:** CS-207.

CS-207 Programming II, 3 cr. This course provides an in-depth study of the principles of structured algorithmic processes and their program implementation using Pascal. Emphasis is given to the design of algorithms and program development (with documentation) involving both numeric computations and string manipulation techniques. Problems will be selected from both the scientific and business areas. Students will become experienced in algorithmic problem solving using pseudocode and will develop programs in interactive Pascal. **Prereq.:** CS-200.

CS-302 Systems Programming, 3 cr. Introduction to systems programming, including use and implementation of assembler, macros, loaders, compilers, and operating systems. **Prereq.:** CS-304, CS-308 and CS-333.

CS-303 Basic Concepts in Computer-Assisted Instruction, 3 cr. Introduction to concepts of computer-assisted instruction and the programs and equipment used. Topics include: tutorial, drill and practice, simulation and game programs, and computerized learning-center management. **Prereq.:** CS-200.

CS-304 Data Structures, 3 cr. This course provides an introduction to basic data structures, their storage implementation and applications in computer science. Pascal will be the language used to illustrate the data structures studied. **Prereq.:** CS-207.

CS-305 Computer Logic and Circuitry, 3 cr. Introduction to logical design of computers and some of their applications. Included are Boolean algebra, switching theory, number systems, numerical codes, and computer organization. Engineering problems are de-emphasized. Computer word organization, languages, and use of computers for simple problems will be explained. **Prereq.:** CS-200 or equivalent introduction to Boolean algebra.

CS-306 Advanced Assembler Programming, 3 cr. Advanced topics in assembler language programming, including subroutine linkage, macro construction and data management concepts, and facilities. Emphasis is on the definition, creation, and maintenance of basic DASD files using JCL and data management macro instructions. *Prereq.: CS-205 or equivalent.*

CS-307 Programming Languages, 3 cr. This course provides an introduction to fundamental concepts of programming languages, their structural definition and run time implementation. In addition, it offers a description and a comparative analysis of higher level programming languages such as ALGOL, PL/1, FORTRAN, COBOL, Pascal, APL, LISP, SNOBOL and others. *Prereq.: CS-304 and CS-205.*

CS-308 Operating Systems, 3 cr. A general overview of the ideas underlying operating systems. Included are traditional topics such as file systems, CPU scheduling, memory management and device scheduling, along with topics of more current interest such as deadlock handling, process synchronization and distributed systems. No single operating system is studied; examples are drawn from many sources. *Prereq.: CS-207 and CS-205.*

CS-309 Compiler Theory, 3 cr. Introduction to basic structure and components of a compiler. Finite automata, lexical analysis, regular grammar, context free grammar, top-down and bottom-up parsing techniques. *Prereq.: CS-304 and CS-333.*

CS-310 Topics in Computer Science, 3 cr. Topics which may be presented include: computer languages, new computer system and hardware developments, and new applications of computers. *Prereq.: appropriate to content.*

CS-311 Modern Computer Architecture, 3 cr. This course is intended for those students who wish to understand the architecture and operation of computer systems. Methods for interconnecting processors, memories and I/O devices are discussed. The addressing modes and instruction techniques for manipulation of more complex data structures such as queues, lists and trees are covered. *Prereq.: CS-205 and CS-207.*

CS-312 Advanced COBOL Programming, 3 cr. Advanced topics in COBOL Programming, including Report Writer, Table Handling, file processing techniques, Sort Feature, and subprogram linkage. A major programming project will be assigned. *Prereq.: CS-200 and CS-202; Co-requisite: CS-318.*

CS-313 Quantitative Methods and Computer Use, 3 cr. Mathematical and statistical techniques in current natural, physical and social science research with particular emphasis on computer use and research design development. *Prereq.: CS-207 and MATH-104 or MATH-275 or equivalent.*

CS-314 Independent Study in Computer Science, 3 cr. An opportunity for an individual research or applications project under the direction of an advisor knowledgeable in the field of endeavor. The project will be designed by the student and his/her project advisor, and must be approved by the chairperson of the Department of Computer Science before the project itself is undertaken. *Prereq.: appropriate to content.*

CS-315 Data Base Management, 3 cr. Theoretical foundations and state-of-the-art data base management systems. The relational, hierarchical and network approaches to data base management systems and representative systems are described. User interfaces are emphasized. *Prereq.: CS-207.*

CS-316 Introduction to Systems Analysis, 3 cr. Information processing requirements for an organization, emphasizing business applications. Includes analysis of organization and procedures, forms and work flow, work distribution and methods and effects of computerization. *Prereq.: CS-202.*

CS-318 JCL and Service Programs, 3 cr. The structure and use of IBM OS Job Control Language (JCL), with emphasis on practical programming applications. In addition, the major IBM-supplied service programs (Utilities, Sort/Merge, Loader, and Linkage Editor) will be surveyed, including specific control commands, JCL requirements, and appropriate areas. *Prereq.: CS-202.*

CS-322 Statistical Computer Program Packages, 3 cr. This course provides an in depth study of modern statistical data analysis using as the Binomial and Normal distribution, the Linear Regression model, Analysis of Variance, Nonparametric methods and Computer Random Sampling techniques using MINITAB and GPSS. In addition students will become experienced in the actual implementation of these statistical models with data sets using such statistical software packages as MINITAB, SPSS, BMDP and SAS. *Prereq.: CS-200 and MATH-275 or equivalent.*

CS-326 Computer Use for Numerical Methods, 3 cr. Numerical algorithms fundamental to scientific computer work. Includes a detailed discussion of the errors involved in polynomial interpolation, quadrature, solution of systems of linear equations, solution of non-linear equations, and numerical solutions of ordinary differential equations. The algorithmic approach, the efficient use of computers, the kinds of errors which arise as a result of the manner in which the computer stores and manipulates numbers. *Prereq.: CS-207 and MATH-202 or equivalent.*

CS-330 Telecommunications, 3 cr. Types of data communication channels and networks. Equipment: processors, terminals, modems and modulation, multiplexors. Codes, protocols, and data transmission integrity. The ISO model. Implementation support, management, and control of a data network. *Prereq.: 12 credit hours of 300-level courses in Computer Science.*

CS-333 UNIX System and C Programming, 3 cr. A survey of the UNIX* operating system including commonly used system commands, text editors, the Shell and document preparation facilities. Special emphasis will be placed on C language programming and the UNIX interface for system programming. *Prereq.: CS-304. *UNIX is a trademark of AT&T Bell Laboratories.*

CS-335 Artificial Intelligence, 3 cr. This course describes the kinds of problems which fall into the area of Artificial Intelligence such as Natural Language Understanding, Vision and Expert Systems, and what makes these problems difficult. Methods are given which show how these problems can be given structure so that conclusions can be drawn from the knowledge each system has available to it,

thus enabling such a system to appear to "think" like an intelligent human being. *Prereq.: CS-304.*

CS-337 CICS Programming Using COBOL, 3 cr. Study of online applications concepts and programming techniques using IBM's Customer Information Control System teleprocessing monitor and language. Development of maps and programs using CICS Basic Mapping Support and Command-Level Language with COBOL to communicate with the CICS monitor, access shared files, and format and process terminal screens. *Prereq.: CS-312 and CS-205.*

CS-350 Advanced Discrete Structures, 3 cr. Graph theory, basic counting methods, abstract machines and formal languages from a computer science point of view. *Prereq.: CS-304 and CS-201.*

CS-390 Supervised Field Study I, 3 cr. (Internship) The student completes a computer programming project for an institution at the institution site. The institution defines the project which must be approved by the Department of Computer Science for the purpose of satisfying the course requirement. The project should take approximately 168 hours to complete. *Prereq.: at least 24 hours credit in Computer Science courses in an approved track with an average of "B" or better, consent of sponsoring institution, and consent of the department.*

CS-391 Supervised Field Study II, 6 cr. (Internship) Same as CS-390 except that project should take approximately 336 hours to complete.

CS-392 Supervised Field Study III, 9 cr. (Internship) Same as CS-390 except that project should take approximately 504 hours to complete.

CS-401 Software Engineering, 3 cr. The complete software development process: requirement specification, design, coding, testing and maintenance. Various software engineering methods for the development of large-scale quality software are presented. *Prereq.: graduate standing, CS-402.*

CS-402 Advanced Systems Programming, 3 cr. Study of system programming tools, their use and their construction. Includes the development of an integrated systems programming environment consisting of a processor simulator, an assembler and a loader. *Prereq.: CS-304, CS-308 and CS-333.*

CS-404 Analysis of Algorithms, 3 cr. Analysis of algorithms. General trees with applications including lexicographic search trees (Tries) and external search trees (B-trees). Graphs including depth-first and breadth first traversals. *Prereq.: CS-304 and 201.*

CS-408 Advanced Operating Systems, 3 cr. Advanced operating system design and construction concepts such as memory, processor, process, and secondary device management, synchronization and communication, security and protection, system performance and evaluation, network, distributed, and fault-tolerant systems. Study of operating systems highlighting these concepts. *Prereq.: graduate standing, CS-402, CS-308 and CS-333.*

CS-409 Topics in Compiler Theory, 3 cr. Design and construction of compilers. Study of actual compilers and development of a compiler for an existing language. *Prereq.: CS-333.*

CS-415 Design of Data Base Systems, 3 cr. Design and construction of data base systems. Comparison and evaluation of alternative data base organizations. *Prereq.: graduate standing and CS-315.*

CS-426 Advanced Numerical Methods, 3 cr. Study of solutions of linear equations and matrix methods in general including eigenvalues and vectors. Review of interpolation, integration, and differentiation of functions. Methods of solution of ordinary differential equations. Overview of kinds and numerical solutions of second order partial differential equations. Several cases are studied in detail. *Prereq.: graduate standing, CS-326, MATH-243 and MATH-303.*

CS-430 Queueing Theory in Communication Networks, 3 cr. Queueing Systems, birth and death models, Markovian queues, the M/G/1 model, Erlang's equations, models of computer and telecommunication systems. *Prereq.: CS-330 and MATH-202.*

CS-431 Digital Telephony, 3 cr. Advantages over analog telephony, voice digitalization, digital transmission and multiplexing, switching, networks (synchronization, control, and management), traffic analysis, terrestrial vs. satellite. *Prereq.: CS 330 and MATH 202.*

CS-435 Expert Systems, 3 cr. Study of the design and implementation of expert systems. *Prereq.: CS-304 and CS-201.*

CS-440 Computer Graphics, 3 cr. Graphics hardware. Scaling and data charting. Representation of two-dimensional objects. Translation and rotation of objects. Two-dimensional line clipping. Three-dimensional object representation. Perspective in three-dimensional object representation. Line-clipping and hidden line and face removal in three dimensions. *Prereq.: Graduate Standing.*

CS-442 Topics in Network Design, 3 cr. Protocols for computer networks. Performance requirements, evaluation and analysis. Case studies of actual networks. *Prereq.: Graduate Standing.*

CS-450 Advanced Computer Architecture, 3 cr. Computer system structure and design issues such as ALU design, arithmetic algorithms, memory hierarchy, control, microprogramming, instruction sets, addressing, input-output. Comparison of specific examples of computer models and selected topics on parallel processors. *Prereq.: CS-402.*

CS-460 Computer Security, 3 cr. Study of existing hardware and software techniques for implementing security. Passwords, encryption and authorization schemes. Special security problems presented by distributed and network environments. *Prereq.: admission to the Program.*

CS-470 Pattern Recognition, 3 cr. Statistical and semi-mathematical methods of pattern recognition. Image processing with industrial and commercial applications. Application to sound and visual identification problems. *Prereq.: CS-409.*

CS-490 Master's Thesis Project, 3 cr. Large scale software project and associated documentation. Topic for the project is chosen in conjunction with a thesis advisor. *Prereq.: 30 hours of graduate credit.*

CS-499 Independent Study, 3 cr. Advanced study under the direction of a faculty advisor; the area of study is selected by the student and the advisor, and must be ap-

proved by the Department chairperson prior to the beginning of the term. **Prereq.:** CS-402, CS-409 and consent of instructor.

CRIMINAL JUSTICE

Shelley Bannister, J.D., M.A., Assistant Professor
 Randolph Bowcott, M.A., Assistant Professor
 Kingsley Clarke, J.D., Assistant Professor
 Renny Golden, D.Min., Associate Professor
 Bernard Headley, Ph.D., Professor, Chairperson
 Dragan Milovanovic, Ph.D., Associate Professor
 A. Kathryn Stout, Ph.D., Assistant Professor

The Department of Criminal Justice has an interrelated and critical focus. One concentration is on criminology which studies the structural roots of crime. It takes up the legal/social concerns of urban, low-income communities whose members are often clients of the criminal justice system. The other broader concentration is the field of justice studies, which seeks to discover the social/historical roots of the notion of "justice." Justice Studies also examines the ways in which popular understandings of "justice" shape and determine public policy, and attempts to provide systemic explanations for the failure (or triumph) of justice in American society.

The department is unique in that our starting point is the perspective of the poor, socially disenfranchised people of color, women, and refugees. The department makes a special effort to involve and serve community groups, minorities, and women. Field experience compliments the academic program.

The program of study prepares the student for the field of human and social services, for critical legal studies, for research, and for continuation on to law and graduate schools. Criminal justice practitioners who wish to develop a more comprehensive understanding of social policy and social justice will find the program well-suited to their needs.

Because of large student demand, the department has developed an admission procedure. Applications for admission to the major, as well as the minor, are available at the departmental office.

UNDERGRADUATE PROGRAMS

Major in Criminal Justice for the Bachelor of Arts Degree

All criminal justice majors take five required courses, in addition to one specialized area course, a three credit hour practicum, and a six credit hour field work seminar. Current information on courses may be obtained from the departmental office.

Required Courses:

CRJU-201 Introduction to the Criminal Justice System 3 cr.

CRJU-312 Theories of Criminal Behavior.....	3 cr.
CRJU-331 Law and Racism in America	3 cr.
CRJU-341 Skills for Inquiry in the Criminal Justice System I.....	3 cr.
CRJU-342 Skills for Inquiry in the Criminal Justice System II.....	3 cr.
Specialized Area Courses (Choose one).....	3 cr.
CRJU-313 Prisons and Jails	
CRJU-321 Women's Advocacy: Rape & Woman-abuse	
CRJU-326 Juvenile Justice System	
CRJU-335 Legal Process I	
CRJU-339 Tenants Rights Clinic	
CRJU-345 Practicum	3 cr.
CRJU-350 Field Work Seminar	6 cr.
Electives	18 cr.
Total	45 cr.

The electives in criminal justice or related fields (300-level courses only) must be selected in consultation with a faculty advisor and should be chosen in an area of concentration related to the student's academic and career interests.

Minor in Criminal Justice (21 cr. hrs.)

Required Courses:

CRJU-201 Introduction to the Criminal Justice System.....	3 cr.
CRJU-312 Theories of Criminal Behavior.....	3 cr.
CRJU-331 Law and Racism in America	3 cr.
CRJU-341 Skills for Inquiry in the Criminal Justice System	3 cr.
Three (3) electives in criminal justice	9 cr.
Total	21 cr.

Note: The department will accept a maximum of nine (9) transfer credit hours in Criminal Justice or Criminology from other colleges and/or universities toward the major and three (3) credit hours toward the minor, provided the student has received a passing grade of C or above in those courses.

COURSE OFFERINGS

CRJU-201 Introduction to the Criminal Justice System, 3 cr. Overview of police, court, and prison practice with attention to class, race, and sex discrimination in the criminal justice system. Emphasis on the relationship between crime and key political and economic structures.

CRJU-309 Portrayal of Crime in the Media, 3 cr. Analysis of the media's presentation of crime in the 20th century with attention to the historical development of the portrayal of crime and its effect on public attitudes regarding "crime" and the "criminal". Various forms of the media are individually considered, most notably television, film and newspaper.

CRJU-311 Women, Crime, and the Criminal Justice System, 3 cr. The position of women in society; theories

female criminality; crimes committed by and against women such as prostitution, rape, woman abuse, and forced sterilization. Treatment of women by various social and criminal justice agencies.

CRJU-312 Theories of Criminal Behavior, 3 cr. Historic overview of theories of crime from classical school to currently popular viewpoints including Marxist and radical theories with emphasis on the relationship between theory and criminal justice policy formulation. **Prereq.:** CRJU-201.

CRJU-313 Prisons and Jails, 3 cr. Study of the historic development of prisons focusing on current practice and emphasizing consequences of expanding the prison population and community based alternatives to incarceration. Field trips.

CRJU-314 Police in the Minority Community, 3 cr. Overview of the social, political and economic consequences resulting from historical and contemporary treatment of U.S. minorities by law enforcement personnel with emphasis on the development of policy focusing on police methodology in controlling and creating levels of crime within urban areas. Theoretical and practical issues involving bias, discretion and excessive force.

CRJU-315 Proseminar in Criminal Justice, 3 cr. Intensive exploration of topics of interest to justice studies. Consult the Schedule of Classes for specific topics.

CRJU-320 Independent Study in Criminal Justice, 3 cr. Individual investigation into a topic of the student's choice. **Prereq.:** consent of instructor.

CRJU-321 Women's Advocacy: Rape and Woman-abuse I, 3 cr. Study of the medical, legal, psychological, and sociological aspects of rape and woman-abuse, a general overview of the criminal and civil aspects of the Criminal Justice System in regard to these crimes. Students will learn to counsel victims and act as lay legal advocates.

CRJU-323 Women Behind Walls, 3 cr. Study of women in prison and mental institutions and the socio-economic factors that contribute to determining what type of women go to prison vs. mental institutions.

CRJU-324 Women as Political Prisoners, 3 cr. This course examines the three areas in which women can be defined as political prisoners: 1) women imprisoned for political acts; 2) women imprisoned for self-defense measures; 3) women imprisoned for petty 'economic' crimes such as prostitution.

CRJU-325 Women and Revolution: Theories of Justice, 3 cr. Theories of justice informing revolutionary practice with attention to the role played by women in revolution, especially in liberation struggles in Central America. **Prereq.:** A women's studies course.

CRJU-326 Juvenile Justice System, 3 cr. Socio-economic analysis of the history of the juvenile justice system in an effort to understand how the system functions and whom it serves.

CRJU-327 Immigration Policy and Human Rights Violation in Central America, 3 cr. Immigration & Naturalization Service legal deportation policy of Central American refugees and the relationship between that policy and contin-

ued U.S. State Department support of Salvadoran and Guatemalan governments.

CRJU-328 Sanctuary: The Church Breaks the Law, 3 cr. The movement of religious groups challenging civil authority by harboring Central American refugees slated for deportation by the U.S. Immigration Service.

CRJU-329 Politics of Punishment, 3 cr. Exploration, from a global perspective of the history, development, and philosophies of punishment and of the debate within the United States and the countries of Western Europe over the purpose of correctional institutions.

CRJU-330 Legal Research and Bibliography in Criminal Law, 3 cr. Study of basic reference and source materials. Visits to law libraries are required. Presentation of a written argument, a written brief, and oral arguments.

CRJU-331 Law and Racism in America, 3 cr. The nature of racism, its essential features and their relationship to the legal, social, and economic practices in the United States. **Prereq.:** CRJU-201.

CRJU-332 Fascism and the Law, 3 cr. The relationship between the development of fascism and manipulation of the law and legal system by the national bourgeoisie and the fascists. Fascist tendencies in modern day Mexico, the Soviet Union, and the United States.

CRJU-333 Community Law, 3 cr. General introduction to the impact of law on the public: consumer law, family law, and individual rights.

CRJU-334 Criminal Law and Procedure, 3 cr. The basic principles of American criminal law, current issues and controversies surrounding the criminal justice process, and the constitutional rights of the accused. **Prereq.:** CRJU-201.

CRJU-335 Legal Process I, 3 cr. Analysis of common law and the role of precedent with emphasis on appellate courts, particularly the U.S. Supreme Court.

CRJU-336 Legal Process II, 3 cr. Continuation of CRJU-335. Intensive written training in the analysis of legal problems and the use of legal materials. **Prereq.:** CRJU-335.

CRJU-337 Workers' Rights and Human Rights, 3 cr. Basic labor law: workman's compensation, unemployment compensation, National Labor Relations Act, etc., discussions on worker influence on factories.

CRJU-339 Tenants Rights Clinic, 3 cr. Under the supervision of a licensed attorney, students study issues relating to landlord/tenant disputes and conflicts. Students are trained to define and negotiate such problems.

CRJU-341 Skills for Inquiry in the Criminal Justice System I, 3 cr. Development of analytic and writing skills. Introduction to the methodology of the social sciences. Students develop research designs and initiate studies on criminal justice topics. Should be taken immediately after CRJU-201. **Prereq.:** CRJU-201.

CRJU-342 Skills for Inquiry in the Criminal Justice System II, 3 cr. Continuation of CRJU-341. **Prereq.:** CRJU-341.

CRJU-345 Practicum in Criminal Justice, 3 cr. Specific skills necessary for entry level agency/community work.

Prereq.: All majors must have completed one of the five specialized area courses and nine additional hours of required courses; consent of chairperson.

CRJU-350 Field Work Seminar, 6 cr. Application of the specific skills learned in the practicum, as well as other classroom theories and concepts, in an agency/community setting. 15 hours per week at work in the field and a 1½ hour weekly seminar. **Prereq.:** completion of all major requirements and consent of chairperson.

EARTH SCIENCE

Robert W. Doehler, Ph.D., Professor
Albert W. Forslev, Ph.D., Professor
Laura Sanders, Ph.D., Assistant Professor
Charles W. Shabica, Ph.D., Professor, Chairperson
Mohan K. Sood, Ph.D., Professor
Hansa D. Upadhyay, Ph.D., Professor

The Department of Earth Science uses an integrated approach to the study of the problems of the earth environment through a synthesis of geology, meteorology, and oceanography. Great progress and changes have taken place in the earth sciences in recent years. Of particular current interest are: Plate Tectonics which has revolutionized thinking in earth science; satellite studies of the earth; and the focus on energy resources, hydrogeology and hazardous waste isolation. The Department emphasizes geology however, with attention to the other areas. Strong emphasis is placed on experimental and field studies.

Curricula are individually planned to provide a broad basic training in earth science, and more specifically, to prepare students for further graduate study, for careers in the energy, mineral, hydrogeological and environmental fields, or for teaching earth science in secondary schools and colleges. Programs have the flexibility to meet individual student needs.

The department currently offers areas of concentration in geology, including petrology-mineralogy, minerals and energy resources, hydrogeology, structural geology-plate tectonics, soil and environmental sciences, and lake and marine coastal systems. Techniques of problem-solving in earth science are emphasized.

Departmental equipment includes apparatus for X-ray diffraction and X-ray fluorescence analysis, physical ground water flow model, hydrogeological equipment, electrical resistivity units, field equipment for ground water and soil sampling, and equipment for thin section and rock preparation, and mineral separation. There are also sedimentation tanks, centrifuge and size analysis apparatus, atomic absorption spectrophotometer, a student micro-computer lab, computerized weather facsimile and weather satellite monitoring systems, a teaching seismograph, full facilities for petrographic, hydrogeologic, and water quality analysis, and a 40' research vessel equipped for lake coring, bottom profiling and water sampling.

The Department of Earth Science offers courses leading to the degrees of Bachelor of Science and Master of Science.

UNDERGRADUATE PROGRAMS

Major in Earth Science for the Bachelor of Science Degree

This curriculum is designed for students who wish to prepare for (1) graduate work in earth science; or positions (2) in mineral and oil industries; (3) U.S. or state geological surveys; (4) environmental agencies; or (5) certification in secondary education.

Required Courses:

ESCI-206	Rocks and Minerals	4 cr.
ESCI-207	Atmosphere and Oceans	4 cr.
ESCI-211	Physical Geology	4 cr.
ESCI-212	Historical Geology	4 cr.
ESCI-323	Field Geology	4 cr.
ESCI-331	Geological Structures and Map Interpretation	4 cr.
Four courses selected from:*		15-16 cr.
ESCI-311	Mineralogy	4 cr.
ESCI-314	Paleontology	4 cr.
ESCI-316	Stratigraphy	4 cr.
ESCI-317	Principles of Sedimentation	4 cr.
ESCI-319	Petrology	4 cr.
ESCI-322	Economic Geology	4 cr.
ESCI-328	Marine Geology	3 cr.
ESCI-330	Structural Geology	4 cr.
ESCI-337	Principles of Hydrogeology	3 cr.

Required Courses in Related Fields:

CHEM-211 and CHEM-212	9 cr.
MATH-107 and MATH-202	8 cr.
PHYS-201/203 and PHYS-202/204	8 cr.
Total	64-65 cr.

* Course substitutions may be allowed by prior arrangement with the Department.

Students wishing to be certified to teach earth science in Illinois secondary schools should consult the Secondary Education section of this catalog.

Minor in Earth Science (19-20 cr. hrs.)

Required Courses:

ESCI-206	Rocks and Minerals	4 cr.
ESCI-207	Atmosphere and Oceans	4 cr.
ESCI-211	Physical Geology	4 cr.
ESCI-212	Historical Geology	4 cr.
One elective Earth Science course at the 300-level		3-4 cr.
Total		19-20 cr.

GRADUATE PROGRAM

Master of Science in Earth Science

The master's program in earth science is aimed toward careers in teaching, government, and industry. It is designed to provide the academic training necessary for careers in energy, hydrogeology and waste management, mineral industries, and for employment with environmental and other agencies. In addition, program flexibility enhances relevance for secondary and elementary teachers. Students are encouraged to participate in basic research under the direction of departmental faculty as part of the program.

Each program is systematically organized under the guidance of a faculty advisor. At the time of acceptance to degree candidacy, the department decides if the student is eligible to participate in the thesis option. Completion of a thesis carries six hours of credit for ESCI-414, Thesis Seminar: Earth Science. Students who do not pursue a research thesis, must take two additional courses at the 400-level, register for ESCI-402 and write a departmental research paper to meet the research requirement. An oral presentation and defense is required for both options.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Admission to the degree program requires 15 undergraduate credit hours in earth science, a minimum of eight credit hours in chemistry including at least one laboratory course, and eight credit hours in physics including at least one laboratory course. An applicant lacking up to six credit hours of the above requirements may be admitted conditionally but must remove the deficiency as soon as possible.

Requirements for the Degree:

Upon full admission to the program, the student must satisfactorily complete 30 credit hours of earth science courses at the 300 and 400-level for the research thesis option (ESCI-414) or 33 credit hours of earth science courses at the 300 and 400 level for the department research paper option (ESCI-402). A majority of these courses must be taken at the 400 level. No more than three credit hours in a non-research earth science seminar course may be taken in addition to ESCI-402 and applied to this total.

Financial Assistance:

A limited number of teaching and graduate research assistantships as well as tuition waivers are available. Contact the department for additional information.

COURSE OFFERINGS

ESCI-121 Earth Science: General Survey, 3 cr. Basic concepts of geology, meteorology, oceanography, and the solar system. Discussion of topics of current interest in the

earth sciences with emphasis on methods of preserving the natural environment. Lecture 2 hours, lab 2 hours.

ESCI-122 Great Mysteries of the Earth, 3 cr. Exploration of great mysterious phenomena of the earth, using the scientific method and modern scientific knowledge. Includes topics such as: origins of the universe, solar system, and the earth; the origin of life, the age of the earth and its rocks, continental drift and plate tectonics, ice ages, rise and fall of the dinosaurs, the Loch Ness Monster, the legend of Atlantis, the Bermuda Triangle, the pyramids and Stonehenge, and UFO's.

ESCI-123 Geology, Resources and Environment, 3 cr. Earth, its structure, composition and resources. Mineral and energy resources, their formation and distribution, their supply and demand projections for the future. Water resources and water quality. Environmental impact of resources, nuclear and other waste disposal, geological aspects of earthquake and volcanic hazards. Lecture 2 hours; lab 1 hour.

ESCI-203 Geology of Illinois, 3 cr. Origin, history, and evolution of the rocks and fossils in Illinois. Economic minerals and fossils and mineral-collecting localities. Topography and soil together with the processes responsible for them. Current geological activities within the state.

ESCI-206 Rocks and Minerals, 4 cr. A detailed introduction to rocks and minerals — the essential materials of the solid earth. Classification and systematic study of the chemical and physical properties of the common rock-forming mineral groups; textural and mineral compositional studies of common igneous, sedimentary, and metamorphic rock groups. Optical studies of selected minerals and rocks. Lecture 1 hour and laboratory 4 hours. **Prereq.:** ESCI-211 and CHEM-211.

ESCI-207 The Atmosphere and the Oceans, 4 cr. Comprehensive introduction to the earth's hydrosphere and atmosphere; their origin and evolution, physical and chemical characteristics, actions and interactions. Lecture 2 hours, laboratory 2 hours involving the use of maps, charts, and instruments. **Prereq.:** high school chemistry and physics or equivalent strongly recommended.

ESCI-208 Geology of the National Parks, 3 cr. Study of the geological processes producing and controlling the lands within the National Park System.

ESCI-211 Physical Geology, 4 cr. Detailed study of the materials comprising the earth's crust and interior and the forces acting to change its surface; the origin of continents and ocean basins in light of recent geological research. Lecture 3 hours, lab 2 hours.

ESCI-212 Historical Geology, 4 cr. Evolution of the earth and its flora and fauna, paleoecology; principles of paleontological stratigraphy and techniques of relative and absolute age determination. Lecture 3 hours, lab 2 hours. **Prereq.:** ESCI-211.

ESCI-214 Field Studies in Earth Science, 2 cr. Locations which show a variety of rock and mineral formations, structural features, weathering and erosional features, soil formations, and landforms are visited during a weeklong field

trip following the winter trimester. On-the-spot discussions are designed to interpret the origin and history of these phenomena. **Prereq.:** ESCI-121 or ESCI-211.

ESCI-301 Geologic Remote Sensing, 3 cr. Introduction to the principles of remote sensing with an emphasis on the use of Landsat imagery in geologic investigations; history of remote sensing, operation of multispectral scanner systems, high altitude infra-red imagery, radar imagery, and digital image processing; applications to resource exploration and geologic mapping. Lecture 3 hours, lab 2 hours. **Prereq.:** ESCI-211.

ESCI-309 Geochemistry, 3 cr. Chemical composition of the earth, element abundances, cosmochemistry, meteorites, origin of elements, geochronology, geothermometry, geobarometry, principles of trace element distribution. Igneous, metamorphic, and sedimentary environments. **Prereq.:** CHEM-211 and ESCI-206 or consent of instructor.

ESCI-311 Mineralogy, 4 cr. Crystallographic principles, crystal systems, and crystal chemistry in the study of minerals. Composition, structure, occurrence, and uses of common minerals. Study of hand specimens and thin sections of minerals and the use of physical and optical properties in their identification. Lecture 3 hours and lab 2 hours. **Prereq.:** CHEM-211 and ESCI-206.

ESCI-312 Mineral Resources, Environment and Man, 3 cr. The interrelationships of mineral resources, the environment, and man. Importance of the mineral resources (coal, oil, nuclear fuels, metals, building materials) to the economy, industry, and society. Minerals distribution in the U.S. and their future outlook until the year 2000. Energy supply problems and the technological solution. **Prereq.:** six hours in earth science or consent of instructor.

ESCI-314 Paleontology, 4 cr. Principles, study of invertebrate phyla, morphology, taxonomy, evolution and paleoecology. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-212 and BIOL-ZOOL-211.

ESCI-316 Stratigraphy, 4 cr. Principles of stratigraphy including classification of rock units, methods of correlation, general relationship of diastrophism to the depositional sedimentary patterns; systematic study of the more important stratified rocks of North America. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-212 and ESCI-317.

ESCI-317 Principles of Sedimentation, 4 cr. The process governing the formation, transportation, and deposition of sediments, and the alterations that transform them into sedimentary rocks. The practical application of these techniques is developed in the laboratory. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-311.

ESCI-319 Petrology, 4 cr. Classification of rocks. Study of mineralogical and textural relations of major rock groups in hand specimens and thin sections. Chemical composition of rocks. Chemical and petrographic data interpretation. Interrelation of petrological processes and plate tectonics. Description of selected and widely referred petrologic complexes. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-311.

ESCI-320 Limnology, 3 cr. Physical processes in the lake environment with special attention to Lake Michigan;

also man's influence on lake processes. **Prereq.:** nine hours in earth science or related natural science or consent of instructor.

ESCI-322 Economic Geology, 4 cr. Geological occurrence, distribution, classification and origin of major mineral deposits and mineral fuels, and ore petrography. Systematic description of selected mineral resource provinces. Geological, geochemical, and geophysical methods in mineral exploration programs. Case histories. Current development in search for minerals. Mineral property assessment, economics, projections, and implications. Lecture 3 hours and lab 2 hours. **Prereq.:** ESCI-206 and ESCI-331.

ESCI-323 Field Geology, 4 cr. Introduction to field methods including pace-and-compass and plane table mapping; observation and interpretation of geological features during field trips to selected areas in the midwestern United States; preparation of geologic maps and reports from field data. Attendance at a field camp for approximately 15 days with additional on campus lecture and laboratory work. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-206 and ESCI-331.

ESCI-325 Seminar in Earth Science, 3 cr. Selected topics of current research interest. Consult the Schedule of Classes for specific topics. **Prereq.:** advanced standing in earth science and consent of instructor.

ESCI-326 Independent Study in Earth Science, 3 cr. Research in the geological sciences, oceanography, meteorology, or astronomy. **Prereq.:** nine hours in earth science and consent of instructor.

ESCI-328 Marine Geology, 3 cr. Structure and geomorphology of the ocean basins and their margins, marine geological processes, sedimentation, and stratigraphy. **Prereq.:** ESCI-121 or ESCI-211.

ESCI-329 Soil Science, 3 cr. Physical and chemical factors in soil formation; composition of soil materials. Relation of soils to parent material; soil classifications, soil as a resource. **Prereq.:** ESCI-121, ESCI-211, or consent of instructor.

ESCI-330 Structural Geology, 4 cr. Spatial and stress-strain relationship of rock deformation, genetic and descriptive aspects of folds, faults, joints, etc., structures related to magmatism and metamorphism, polyphase deformation, and geophysical methods of structural geology, diapirs, cleavage and schistosity, impact structures, tectonites, and petrofabric diagrams. Lecture 3 hours, lab 2 hours. **Prereq.:** ESCI-211, ESCI-212, and PHYS-201.

ESCI-331 Geological Structures and Map Interpretations, 4 cr. Determination of the attitude and thickness of inclined strata and their bearing on topography and outcrop patterns; preparation of geological maps from given field data; and interpretations of aerial photos, topographic sheets, and geological maps depicting folds, faults, unconformities, and intrusive bodies. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-211.

ESCI-335 Meteorology I, 4 cr. Introduction to the processes at work in the earth's atmosphere and the physical laws that control them; horizontal and vertical circulations, atmospheric stability, radiation balance, precipitation, air masses, frontogenesis, and severe weather. Laboratory work involves extensive use of maps and charts. Lecture 3 hours, lab 2 hours. **Prereq.:** PHYS-201.

ESCI-337 Principles of Hydrogeology, 3 cr. Introduction to the theory and principles of groundwater flow as well as streamflow. Topics include the hydrologic equation, evapotranspiration, well drilling and testing, porosity and permeability, Darcy's law, confined and unconfined aquifers, flow-nets, geology of groundwater occurrence, water table maps, geophysical exploration methods, well logs, streamflow and hydrographs. **Prereq.:** ESCI-211 and MATH-104.

ESCI-338 Petrography of Fine-Grained Sediments, 3 cr. Mineralogical and chemical analysis of shale, clay, glacial till, soil and related sedimentary materials using x-ray diffraction and atomic absorption techniques. Analyses are both qualitative and quantitative in nature. Lecture 2 hours, lab 2 hours. **Prereq.:** ESCI-206 or ESCI-311.

ESCI-339 Field Hydrogeology, 4 cr. Field techniques of measuring infiltration, soil moisture, aquifer permeability and hydraulic conductivity. Practice in conducting geophysical surveys and drilling, logging, and developing ground water wells. Methods of sampling water for chemical analysis. Visits to drilling, monitoring, and waste management sites. Methods of recording, analyzing, mapping, and reporting field data. Lecture 2 hours, lab 3 hours. **Prereq.:** ESCI-337.

ESCI-401 Environmental Stability — Lake Michigan, 3 cr. Origin and development of Lake Michigan; paleolimnology; the eutrophication process and its relationship to human and industrial wastes. Emphasis placed on field and laboratory techniques. Lecture 2 hours, lab 1 hour. **Prereq.:** graduate standing, ESCI-320, and advanced standing in physical or biological sciences or consent of instructor.

ESCI-402 Current Problems in Earth Science, 3 cr. Study of the current problems together with recent research in the earth sciences; classroom discussions, including self-directed investigations into these areas by individual students. **Prereq.:** graduate standing.

ESCI-403 Graduate Seminar in Earth Science, 3 cr. Directed research, analysis, discussion and presentation of reports on important topics in earth science, such as hydrogeology, geotechnology, remote sensing, tectonics, mineral/energy resources, petrology, coastal geology, hazardous waste disposal and mining. **Prereq.:** graduate standing and six hours of graduate level earth science.

ESCI-407 Hydrogeology, 3 cr. Occurrence, movement, storage, and distribution of ground water; problems pertaining to water quality; sea water intrusion, water pollution and recharge of aquifers. Lecture 2 hours, lab 2 hours. **Prereq.:** graduate standing, six credits in earth science, or consent of instructor.

ESCI-408 Advanced Mineralogy and Crystallography, 3 cr. Advanced concepts in mineralogy with reference to crystal chemistry and structural crystallography of some selected mineral groups. **Prereq.:** graduate Lecture 2 hours, lab 2 hours. **Prereq.:** graduate standing and ESCI-311.

ESCI-409 Igneous Petrology, 4 cr. Principles and applications of phase equilibrium studies of silicate systems at high temperatures and pressures to petrological problems; theories of igneous differentiation processes with examples from selected localities; laboratory studies of petrographic methods and petrochemical calculations; written and oral

student presentations. Lecture 3 hours, lab 2 hours. **Prereq.:** graduate standing, ESCI-311, and ESCI-319.

ESCI-410 Ground Water Development, 4 cr. Study of ground water movement, hydraulics, conjunctive use, water quality with emphasis on model studies. Lecture 2 hours, lab 2 hours. **Prereq.:** graduate standing and ESCI-407.

ESCI-411 Clay Mineralogy, 4 cr. Structure, physical and chemical properties, origin, and occurrence of the clay mineral groups; economic importance of clays, identification of clays using x-ray diffraction techniques. Lecture 2 hours, lab 2 hours. **Prereq.:** graduate standing and ESCI-311.

ESCI-414 Thesis Seminar: Earth Science, 6 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements for the degree of Master of Science in Earth Science. **Prereq.:** acceptance to master's degree candidacy in earth science and invitation by the department to do a research thesis.

ESCI-415 Plate Tectonics, 3 cr. Earth's interior and configuration of lithospheric plates; plate tectonics in relation to seafloor spreading and continental drift; major associated ridges, trenches, transform faults, island arcs, and rift systems; plate subduction and formation of marginal ocean basins; interrelationships of magma generation, metamorphism and ore deposits at plate boundaries; origin of mountain belts and seafloor slabs contained by them; pre- and post-Mesozoic plate tectonics and growth of mountain belts and continents. Lecture 1 hour, lab 1 hour. **Prereq.:** graduate standing, ESCI 319, and ESCI-330.

ESCI-416 Applied Hydrology, 3 cr. Water budget and its various components; hydrologic theories, methodologies, and techniques of data analysis used to estimate and/or determine values for each component of the water budget; computer modeling of water budget components is introduced. Lecture 2 hours, lab 2 hours. **Prereq.:** graduate standing and ESCI-337 or consent of instructor.

ESCI-418 Ore Deposits, 4 cr. Origin, composition, and migration of ore-bearing fluids and their effect on the resulting mineral deposits; classification of ore deposits with reference to well-known mining districts around the world; paragenesis, geothermometry, and isotopic studies; metallogenic provinces and epochs; ore microscopy; property evaluation and ore-reserve estimation. Lab studies of ore-gangue samples from representative mines from around the world. Lecture 3 hours, lab 2 hours. **Prereq.:** graduate standing, ESCI-331 and ESCI-322.

Oceanography

ESCI-OC-324 Oceanography I, 3 cr. Ocean boundaries and bottom topography. Origin and evolution of ocean basins. Nature and characteristics of coastal and marine sediments. Man and his relation to the oceans. Gathering of oceanographic data and development of the marine sciences. Lecture 1 hour, lab 1 hour. **Prereq.:** ESCI-121 or 211, and ESCI-207.

ESCI-OC-325 Oceanography II, 3 cr. Physical and chemical properties and characteristics of sea water. Hydrodynamics—currents, waves, tides, circulation. Life conditions in the ocean environment, relationships to marine biology. Economic oceanography; statistical methods use and marine cartography.

raphy. Lecture 1 hour, lab 1 hour. **Prereq.:** ESCI-121 or 211, and ESCI-207.

ESCI-OC-334 Coastal Marine Research, 4 cr. Plan and execution of a study of the dynamics of marine tidal estuaries. Field trip to Atlantic or Pacific coastal environments. Lecture 1 hour, lab 1 hour. **Prereq.:** advanced standing in the sciences and permission of the instructor.

ESCI-OC-335 Ocean Resources, 3 cr. Comprehensive study of the current and future exploitation of the ocean resources. Lab 2 hours. **Prereq.:** ESCI-121 or 211, and ESCI-207.

ECONOMICS

Daniel J. Bergan, Ph.D., Associate Professor
Audie R. Brewton, Ph.D., Associate Professor
Thomas E. Collum, M.A., Assistant Professor
John Cownie, Ph.D., Professor
Lewis Freiberg, Ph.D., Professor, Chairperson
James A. Kokoris, Ph.D., Professor
Diane L. Petersen, Ph.D., Associate Professor
Sheldon H. Rothstein, M.A., Assistant Professor
Edward F. Stuart, Ph.D., Associate Professor

The Department of Economics offers courses of study leading to the degree of Bachelor of Arts.

Economics is the social science which deals with the production, exchange and consumption of goods and services in a society. It is concerned with the allocation of scarce resources among competing end uses. Courses in the department are designed to describe and explain the methods used by economists and the economic aspects of such topics as inflation, unemployment, international monetary problems, poverty, underdevelopment, and the solutions proposed to solve these problems.

The introductory courses (ECON-215 and ECON-217) are designed to provide basic knowledge and to serve as a foundation for other courses in economics and business. A concentration in economics provides an especially useful background for students who wish to prepare for careers in law, business, or government.

The prerequisite for a major in economics is satisfactory completion of three years or equivalent of high school mathematics. Students planning to do graduate work in economics are urged to complete at least two years of college mathematics, including differential and integral calculus. Students not planning study beyond the baccalaureate level should complete at least one year of college level mathematics. Economics majors and minors are also encouraged to take quantitative economics courses beyond the minimum requirements. Majors are strongly encouraged to take ECON-303 and ECON-304 prior to enrolling in upper division electives. All courses in the economics department carry three hours of credit.

UNDERGRADUATE PROGRAMS

Major in Economics for the Bachelor of Arts Degree

Required Courses:

ECON-215	Principles of Macroeconomics	3 cr.
ECON-217	Principles of Microeconomics	3 cr.
ECON-303	Intermediate Macroeconomic Theory	3 cr.
ECON-304	Intermediate Microeconomic Theory	3 cr.
ECON-220	Business and Economic Statistics I	3 cr.
Electives (any five 300-level Economic courses except 311)		15 cr.
Total		30 cr.

Minor in Economics

(18 cr. hrs.)

Required Courses:

ECON-215	Principles of Macroeconomics	3 cr.
ECON-217	Principles of Microeconomics	3 cr.
ECON-220	Business and Economic Statistics I	3 cr.
Electives (any three 300-level Economics courses except 311)		9 cr.
Total		18 cr.

COURSE OFFERINGS

ECON-215 Principles of Macroeconomics, 3 cr. Elementary aggregate economics. Among the topics covered are economic instability, countercyclical economic policies, money, the banking system, government economic activity, fiscal policy, monetary policy, and national income theory.

Prereq.: MATH-091 or equivalent or sophomore standing.

ECON-217 Principles of Microeconomics, 3 cr. Among the topics covered are supply, demand, prices, the working of markets, the markets for labor and for other factors of production, distribution of the product and contemporary economic problems. **Prereq.:** MATH-091 or equivalent or sophomore standing.

ECON-220 Business and Economic Statistics I, 3 cr. Introduction to the principal methods of statistical analysis as applied to business and economic problems. Topics covered include descriptive statistics, introductory probability and probability distributions, statistical estimation, hypothesis testing, and regression and correlation analysis with computer applications. **Prereq.:** ECON-215, ECON-217, and MATH-106 or MATH-104 or MATH-110.

ECON-302 Economic Development, 3 cr. Theoretical analysis of factors underlying economic development with reference to newly developing nations. Consideration of policy issues concerning attempts to accelerate economic growth.

Prereq.: ECON-215.

ECON-303 Intermediate Macroeconomic Theory, 3 cr. Consumption and investment theory, the definitions and determination of national income, employment and the price level. Also considered are the economic effects of fiscal and

monetary policy. **Prereq.:** ECON-215, ECON-217, and MATH-110 or MATH-106 or MATH-104.

ECON-304 Intermediate Microeconomic Theory, 3 cr. A systematic study of the role of the price system in organizing economic activity and an evaluation of its effectiveness; price determination and resource allocation under competition, monopoly, oligopoly and monopolistic competition; theories of demand, cost, partial, and general equilibrium. **Prereq.:** ECON-215, ECON-217, and MATH-110 or MATH-106 or MATH-104.

ECON-306 Labor Economics, 3 cr. Analysis of supply and demand for labor, the determination of wage rates, employment, working hours and labor force participation; with emphasis on the effects of unionism and government activities on these areas. **Prereq.:** ECON-217 or consent of instructor.

ECON-307 Money and Banking, 3 cr. The nature and functions of money and the role of the monetary sector in the determination of income and employment with particular attention on the institutional framework, money markets, commercial banking, deposit expansion, the Federal Reserve System, and monetary policy and its instruments. **Prereq.:** ECON-215 and ECON-217.

ECON-308 Comparative Economic Systems, 3 cr. Analysis of the structure, institutions, and performance of alternative economic systems: capitalism, socialism, communism. Selected countries are studied as examples of each system.

Prereq.: ECON-215 or ECON-217 or consent of instructor.

ECON-309 Public Finance, 3 cr. An investigation of the economic effects of governmental activities. The major types of taxes and expenditure proposals are considered. In addition, intergovernmental fiscal relations and fiscal policy are discussed. The course will emphasize, but not be restricted to American fiscal institutions. **Prereq.:** ECON-215 and ECON-217.

ECON-310 Business and Economic Statistics II, 3 cr. This course is a continuation of ECON-305. Topics to be covered include analysis of variance, multiple regression and correlation, time series analysis, nonparametric tests, and decision theory with computer applications. **Prereq.:** ECON-220.

ECON-311 Consumer Economics, 3 cr. Examination of topics such as general principles of consumer purchasing, budgeting income, use of consumer credit, use of leisure, money, energy, renting or owning a home, use of insurance, calculating true rates of interest charges, consumer taxes, consumer protection, and rights and responsibilities. Not acceptable for the major or minor. **Prereq.:** ECON-215 or ECON-217 or consent of instructor.

ECON-312 Mathematical Economics, 3 cr. Conventional macro-and microeconomic theories are set out in mathematical form utilizing algebra and calculus. Topics to be covered include sets, functions, matrices, differential and integral calculus and optimization. **Prereq.:** ECON-215, ECON-217, MATH-104 or MATH-106 or MATH-110.

ECON-313 Economic History of Europe, 3 cr. Development of the modern economic systems and institutions of Europe from their late medieval and Renaissance beginnings; the revival of trade, the growth of towns, the Commercial Revolution, the development of new systems of economic thought to support capitalism, the Industrial Revolution, the

rise of new economic forms such as socialism, modified capitalism, and "mixed" economies in the twentieth century.

Prereq.: ECON-215 or ECON-217.

ECON-314 The Development of Economic Thought, 3 cr. Historical survey of the major streams of economic thought including classical, Marxian, institutionalist, neoclassical, radical and monetarist thought. The course covers the origins, methods and validity of economic theories. **Prereq.:** ECON-215 and ECON-217.

ECON-315 American Capitalism, 3 cr. Contemporary controversial interpretations of American capitalism; the course centers around ideas of laissez-faire, government regulation and government-business relations; analysis of private property, competition, free enterprise; views of conservatives, liberals and radicals are considered, and a critical examination of recent reformulations of the capitalist system is undertaken. **Prereq.:** ECON-215 or ECON-217 or consent of instructor.

ECON-316 Independent Study in Economics, 3 cr. Intensive study of special topics of economics; faculty guidance. **Prereq.:** consent of instructor.

ECON-318 Introduction to Econometrics and Forecasting, 3 cr. Introduction to the methods by which economic theories are tested with emphasis on applications. Topics include bivariate and multiple regression techniques, hypothesis testing, and violation of the common assumptions. Computer usage. **Prereq.:** ECON-220 and MATH-104 or MATH-106 or equivalent.

ECON-319 Current Economic Problems, 3 cr. Analysis of a contemporary domestic or international issue. Consult the Schedule of Classes for specific topics. **Prereq.:** ECON-215 or ECON-217 or consent of instructor.

ECON-322 International Economics, 3 cr. Introduction of the fundamentals of international trade theory; theoretical, institutional and historical aspects of international economic relations are considered, including foreign exchange and balance of payment problems, tariffs, quotas, and U.S. commercial policies. **Prereq.:** ECON-215 and ECON-217, or consent of instructor.

ECON-323 Economic Development of East Asia, 3 cr. Analysis of factors underlying economic development of nations in East Asia with a focus on China and Japan but including brief consideration of other areas such as Korea, Taiwan, the Philippines, and selected Southeast Asian Nations. **Prereq.:** ECON-215 and ECON-217, or consent of instructor.

ECON-331 American Economic History, 3 cr. Survey of American economic history from the colonial period to the present; controversial issues and interpretations in American history. **Prereq.:** ECON-215 or ECON-217.

ECON-332 Government and Business, 3 cr. Analysis of the competitive structure of industries and the major determinants of industrial organization such as economies of scale, mergers, vertical integration, advertising, and their effects on competitive firm behavior. Examination of the economic foundations and effects of government policies to regulate monopoly. **Prereq.:** ECON-217 or consent of instructor.

ECON-333 Urban Economics, 3 cr. Presentations of fundamental economic tools applicable to urban problems; identification of the economic causes of these problems and

analysis of policies designed to correct them. *Prereq.*: ECON-215 and ECON-217.

ECON-334 Cost-Benefit Analysis, 3 cr. Alternative economic policies resulting from weighing the merits of spending public expenditures on various public projects. A systematic approach to the evaluation of individual projects in the selection of the best project to accomplish a given purpose, and in the establishment of priority order among the projects competing for limited funds. *Prereq.*: ECON-217.

ECON-335 Economics of Transportation, 3 cr. Demand for and costs of transportation. Urban and interurban markets for transport of people and goods. Regulation, deregulation, and public policy. *Prereq.*: ECON-220.

ECON-340 Managerial Economics, 3 cr. The application of economic theory to the analysis of business decision-making. Topics include the theory of production, costs, pricing, and capital budgeting. Specific tools such as constrained maximization and regression analysis are applied in a case approach to the estimation and forecasting of revenues and costs, and to the preparation of budget forecasts. *Prereq.*: ECON 220(305), ECON 304, MATH 104 or equivalent.

ECON-419 Economic Analysis for Managers, 3 cr. This course is an advanced introduction to the application of economic principles and methodologies within the decision-making process of the firm. It cultivates the ability to develop constrained maximization and minimization analyses and to apply those analyses to managerial problems of resource allocation, budgeting and forecasting. *Prereq.*: Admission to the MBA program or consent of instructor.

ENGLISH

Allan Bates, Ph.D., Professor
Thomas J. Bracken, M.A., Assistant Professor
Gary H. Brodsky, Ph.D., Associate Professor
Debra Bruce, M.F.A., Assistant Professor
Earl John Clark, Ph.D., Professor
K. Dale DeVille, Ph.D., Professor
Thomas Hoberg, Ph.D., Professor
Donald L. Hoffman, Ph.D., Professor
C. Jeriel Howard, Ph.D., Professor, Chairperson
Randolph H. Hudson, Ph.D., Professor
Sandra Hunt, Ph.D., Associate Professor
Jacqueline Krump, Ph.D., Professor
Ely M. Liebow, M.A., Professor
Gerald C. Nemanic, Ph.D., Professor
Robert N. Paine, Ph.D., Professor
Dorothy R. Patton, M.A., Associate Professor
James R. Tinsley, Ph.D., Professor
June M. Verbillion, Ed.D., Professor
Harry S. White, Ph.D., Professor

The study of English is designed to help students prepare themselves for a variety of professions and careers where individual talents are valued. It enables students to improve their writing skills, their articulation and their abilities in

analytical reading—all valuable accomplishments. The study of literature refines one's sensibilities, expands one's outlook, and stimulates one's imagination. It is a humanizing activity which helps one discover oneself and one's place in the world.

UNDERGRADUATE PROGRAMS

Major in English for the Bachelor of Arts Degree

Prerequisites: ENGL-101 and ENGL-102 or equivalent.
No more than 12 hours at the 200-level may count towards fulfilling the major requirements.

Required Courses:

ENGL-229 Practical Criticism3 cr.

One course from each of the following groups:12 cr.

ENGL-220 Introduction to Shakespeare
ENGL-330 Shakespeare: Comedies and Romances
ENGL-331 Shakespeare: Tragedies
ENGL-221 English Literature: Beginnings to c. 1750
ENGL-314 Chaucer and His Age
ENGL-315 Literature of the English Renaissance
or another course covering the same period
ENGL-328 17th Century Literature
ENGL-341 Restoration and 18th Century Literature I
ENGL-342 Restoration and 18th Century Literature II
ENGL-329 Milton
or another course covering the same period
ENGL-222 English Literature: c. 1750 to Present
ENGL-321 Literature of the Romantic Movement
ENGL-348 Poetry of the Victorian Age
ENGL-349 Prose of the Victorian Age
or another course covering the same period

One course from each of the following groups:9 cr.

ENGL-218 American Literature: Beginnings to 1880
ENGL-312 Literature of Colonial Times
ENGL-313 American Literary Renaissance: 1830-1860
ENGL-361 Development of the American Novel I
or another course covering the same period
ENGL-219 American Literature: 1880 to Present
ENGL-362 Development of the American Novel II
or another course covering the same period
ENGL-232 Modern British and American Poetry
ENGL-378 20th Century Fiction I
ENGL-379 20th Century Fiction II
ENGL-389 20th Century Poetry II
ENGL-317 Modern American Drama
ENGL-323 Shaw and Modern British Drama
or another course covering the same period

Two courses from the following:6 cr.

ENGL-201 Introduction to World Masterpieces
ENGL-203 Introduction to Short Fiction and the Drama
ENGL-204 Introduction to Poetry and the Novel

ENGL-300 Russian Literature: Gogol - Chekhov
ENGL-302 Love in Western Literature
ENGL-325 Readings in World Literature
ENGL-326 World Drama I: Aeschylus to Tolstoi
ENGL-327 World Drama II: Ibsen to Beckett
ENGL-333 Mythological Backgrounds of English and American Literature
ENGL-334 Biblical Backgrounds of English and American Literature
ENGL-356 Greek Literature in Translation
ENGL-372 Utopian Literature
ENGL-373 Yiddish Literature in Translation

Two electives6 cr.
Total 36 cr.

Major in English Education for the Bachelor of Arts Degree

Because teachers of English in secondary schools are typically required to teach a broad language arts curriculum, this interdisciplinary program combines English, linguistics, reading, and speech and performing arts, and provides excellent preparation for classroom teaching, allowing program graduates to compete favorably for available positions.

In order to meet the language arts/humanities requirements for certification, students are required to take ENGL-101 Writing I, ENGL-102 Writing II, SPCH-COMM-101 Foundations of Communication, and LING-101 Introduction to General Linguistics.

NOTE: The required professional education courses must be completed in addition to the requirements listed below. Refer to the Secondary section of this catalog for additional information.

Requirements:

English and American Literature (21 cr.)

ENGL-218 American Literature: Beginnings to 1880
or ENGL-219 American Literature: 1880 to the Present3 cr.

If ENGL-218 was chosen,
choose one of the following:3 cr.
ENGL-317 Modern American Drama
ENGL-362 Development of the American Novel II

If ENGL-219 was chosen,
choose one of the following:3 cr.

ENGL-312 Literature of Colonial Times
ENGL-313 American Literary Renaissance, 1830-1860
ENGL-361 Development of the American Novel I

ENGL-221 English Literature: Beginnings to c. 1750
or ENGL-222 English Literature: c. 1750 to the Present3 cr.

If ENGL-221 was chosen,
choose one of the following:3 cr.

ENGL-321 Literature of the Romantic Movement
ENGL-341 Restoration and Eighteenth Century Literature I
ENGL-342 Restoration and Eighteenth Century Literature II
ENGL-348 Literature of the Victorian Age I
ENGL-349 Literature of the Victorian Age II

If ENGL-222 was chosen,
choose one of the following:3 cr.

ENGL-314 Chaucer and His Age
ENGL-315 Literature of the English Renaissance
ENGL-328 Seventeenth Century Literature
ENGL-329 Milton

ENGL-220 Introduction to Shakespeare
or ENGL-330/331 Shakespeare3 cr.

ENGL-318F Readings in American Literature:
Junior Novel3 cr.

ENGL-380 Multi-Cultural Literature in America3 cr.

Linguistics (9 cr.)

LING-203 The Development of American English or
LING-204 Language and Society or
LING-206 Language and Literature3 cr.
LING-208 Grammars of English3 cr.
LING-312 History of the English Language3 cr.

Reading (6 cr.)

READ-301 Teaching Reading in the Junior
and Senior High School3 cr.

One of the following courses:3 cr.
READ-306 Linguistics and Reading
READ-311 Fundamentals of Reading Instruction

Speech and Performing Arts (3 cr.)

One of the following courses:3 cr.
SPCH-COMM-215 Group Discussion
SPCH-PERF-255 Oral Interpretation

Composition (6 cr.)

ENGL-376 Advanced Composition3 cr.

One of the following courses:3 cr.

ENGL-235 Introduction to Creative Writing I
ENGL-236 Introduction to Creative Writing II
ENGL-382 Creative Writing: Drama I
ENGL-383 Creative Writing: Drama II
ENGL-384 Creative Writing: Poetry I
ENGL-385 Creative Writing: Poetry II
ENGL-386 Creative Writing: Fiction I
ENGL-387 Creative Writing: Fiction II

Total 45 cr.

Minor in English for the Bachelor of Arts Degree in Elementary Education

Required Courses:

Select one:	3 cr.
ENGL-101 Writing I	3 cr.
ENGL-203 Writing II	3 cr.
ENGL-229 Practical Criticism	3 cr.
ENGL-391 Children's Literature	3 cr.
One other writing course	3 cr.
Two 300-level elective courses	6 cr.
Six hours from each of two of the following areas chosen in consultation with an advisor from the Department of English:	12 cr.
Foreign Languages, Linguistics, and Speech and Performing Arts	
Total	30 cr.

Students must earn a grade of "C" or better in all courses counting towards the minor.

For a complete description of the degree program in Elementary Education, see the elementary Education section of this catalog.

Minor in English: (18 cr. hrs.)

Required Courses:

ENGL-229 Practical Criticism	3 cr.
Two courses selected from the courses listed below:	6 cr.
ENGL-218 American Literature: Beginnings to 1880	
ENGL-219 American Literature: 1880 to Present	
ENGL-221 English Literature: Beginnings to c. 1750	
ENGL-222 English Literature: c. 1750 to Present	
Electives (any additional nine credit hours in literature courses)	9 cr.
Total	18 cr.

NOTE: No more than nine transfer credit hours may be counted toward the minor in English.

GRADUATE PROGRAM

Master of Arts in Literature

The graduate program in English is designed to provide advanced study in literature. It provides for personal development and for professional advancement, particularly in teaching, editorial work, journalism, publishing, writing and research. The program also prepares students for advanced studies leading to the Ph.D.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Students must have completed a minimum of 30 credit hours

of undergraduate work in composition and literature, including at least one course in two of the following topics: Chaucer, Shakespeare, Literary Criticism, and History of the English Language.

Requirements for the Degree:

The program requires 33 credit hours of course work in literature, principally English and American, and a final written examination.

Thesis Option:

A scholarly thesis or an original imaginative work may be written, earning six credit hours. After achieving degree candidacy, the student, in consultation with the graduate coordinator, should select a topic and choose an advisor. The approved thesis or imaginative work must be submitted to the graduate coordinator at least one month before a formal defense.

Examinations:

When all course work is completed, degree candidates must pass a written examination, which is offered twice a year. A student who fails any part of the examination may take that part a second time. Permission to take it a third time may be granted by the departmental graduate committee after a review of the student's record. Additional course work may be required before a third and final attempt.

Students completing the thesis option will give an oral defense of their thesis before a departmental committee.

A student's program should be planned with a view to achieving adequate and substantial preparation in English and American literatures, with some work in world literature. Courses in literary criticism, Shakespeare, Chaucer and the history of the English language must be taken in the master's program if they were not taken in the undergraduate program. While the graduate coordinator may recommend more or less work in English and American literatures, the typical program includes the following course work:

Required Courses:

ENGL-431 Bibliography and Methods of Literary Study	3 cr.
Two American literature courses at the 400-level, including at least one seminar	6 cr.
Three English literature courses at the 400-level, including at least one seminar	9 cr.
Electives chosen from 300-level and/or 400-level courses	9 cr.
ENGL-453 Thesis Seminar: Literature or	
Two additional 400-level courses	6 cr.
Total	33 cr.

COURSE OFFERINGS

ENGL-100 Writing for the International Student, 3 cr. Specialized instruction and practice in beginning writing for students whose first language is not English.

ENGL-101 Writing I, 3 cr. Specialized instruction and practice in beginning writing. Work in usage, grammar, style, paragraphs, and short essays. *Prereq.: English Placement test.*

ENGL-102 Writing II, 3 cr. Continuation of practice in composition with emphasis on a variety of forms of writing and longer essays, culminating in the annotated research paper. *Prereq.: ENGL-101 or advanced placement.*

ENGL-201 Introduction to World Masterpieces, 3 cr. An introduction to selected literary movements, figures, or themes in world literature with emphasis on the relationship of world literature to English and/or American literature.

ENGL-203 Introduction to Short Fiction and the Drama, 3 cr. Examination of two major literary genres—the short story and the drama. Designed as an introductory study of literature at the college level.

ENGL-204 Introduction to Poetry and the Novel, 3 cr. Examination of two major literary genres—poetry and the novel. Designed as an introductory study of literature at the college level.

ENGL-217 The Novella, 3 cr. The short novel, its distinctive characteristics and development; readings of masterpieces from England, America, and continental Europe, with emphasis on the nineteenth and twentieth centuries.

ENGL-218 American Literature: Beginnings to 1880, 3 cr. Representative works in American literature from colonial times to the late nineteenth century.

ENGL-219 American Literature: 1880 to the Present, 3 cr. Representative works in American literature of the last one hundred years.

ENGL-220 Introduction to Shakespeare, 3 cr. Introduction to Shakespeare's dramatic art through a careful reading of selected tragedies, histories, comedies, and romances; designed primarily but not exclusively for the non-English major.

ENGL-221 English Literature: Beginnings to c. 1750, 3 cr. Representative works in English literature from *Beowulf* to the middle of the eighteenth century.

ENGL-222 English Literature: c. 1750 to Present, 3 cr. Representative works in English literature from the middle of the eighteenth century to the modern era.

ENGL-229 Practical Criticism, 3 cr. Introduction to some of the more important critical approaches to literature; emphasis on application as well as theory.

ENGL-232 Modern British and American Poetry, 3 cr. Introduction to modern poetry in English: its origins, dominant themes, and characteristic techniques; readings in a variety of poets, recordings by poets, essays by poets and critics, and individual explorations.

ENGL-234 Literature and Film, 3 cr. Development of the film as a literary genre; methods and techniques of analyzing and evaluating films.

ENGL-235 Introduction to Creative Writing I, 3 cr. Preliminary study to enable students to develop positive approaches to the craft of writing and to explore techniques of the craft.

ENGL-236 Introduction to Creative Writing II, 3 cr. Readings aimed at exploring disciplines of various forms of writing.

ENGL-300 Russian Literature: Gogol-Chekhov, 3 cr. Works (primarily novels, novellas and stories) of the major figures in nineteenth-century Russian literature (Turgenev, Tolstoi, Dostoyevski, etc.), relating them to the social, political, and religious issues they touched on. *Prereq.: six credit hours in English, three at the 200-level, or consent of instructor.*

ENGL-302 Love in Western Literature, 3 cr. The various attitudes toward love, including sexual and family relationships, as depicted in the literature of different ages and cultures with emphasis on the changing social, ethical, and religious context of these views. *Prereq.: same as ENGL-300.*

ENGL-307 Medieval Studies: The Development of the Arthurian Legend, 3 cr. The legend of King Arthur from allusions in early chronicles, through Welsh folk tales, through the courtly versions of twelfth-century France to the compilation by Sir Thomas Malory. *Prereq.: same as ENGL-300.*

ENGL-310 Romantic Rebels, 3 cr. Studying writers such as Blake, Bronte, Nietzsche, and Goethe; the course will examine how romantic individualism, with its emphasis on self-expression sets itself against various types of religious authority, political control, and social normality. *Prereq.: same as ENGL-300.*

ENGL-312 Literature of Colonial Times, 3 cr. Prose and poetry of the Puritan and Revolutionary eras. *Prereq.: same as ENGL-300.*

ENGL-313 American Literary Renaissance: 1830-1860, 3 cr. Prose and poetry of Hawthorne, Melville, Emerson, Thoreau, Whitman, Dickinson, and others. *Prereq.: same as ENGL-300.*

ENGL-314 Chaucer and His Age, 3 cr. Selections from *The Canterbury Tales* and the entire *Troilus and Criseyde* (read in Middle English); Chaucer's significance in relation to language and social background of the period. *Prereq.: same as ENGL-300.*

ENGL-315 Literature of the English Renaissance, 3 cr. Prose and poetry (not drama) of the English Renaissance in the sixteenth century. *Prereq.: same as ENGL-300.*

ENGL-317 Modern American Drama, 3 cr. Major lines of development of modern American Drama from O'Neill to contemporaries like Albee and Mamet. *Prereq.: same as ENGL-300.*

ENGL-318 Readings in American Literature, 3 cr. An intensive study of selected literary movements, figures, or themes in American literature. Consult the Schedule of Classes for specific topics. *Prereq.: same as ENGL-300.*

ENGL-319 Contemporary American Drama, 3 cr. Study of plays by the most important contemporary American dramatists; includes readings, discussions, and occasional attendance at significant performances. *Prereq.: same as ENGL-300.*

ENGL-320 Theater in Chicago, 3 cr. Weekly attendance at plays in leading theaters in Chicago, including regular discussions with theater artists. *Prereq.: same as ENGL-300.*

ENGL-321 Literature of the Romantic Movement, 3 cr. Poetry and prose from 1780 to 1830 including Blake, Burns, Wordsworth, Coleridge, Byron, Shelley, Keats, Lamb, Hazlitt, and DeQuincey. *Prereq.: same as ENGL-300.*

ENGL-322 The American Short Story, 3 cr. The evolution of the American short story as a self-conscious form of literature from Washington Irving to Joyce Carol Oates. The theories of Romanticism, Realism, Naturalism are illustrated. Each student selects one writer of short stories to explore in some depth through an individual report. *Prereq.: same as ENGL-300.*

ENGL-323 Shaw and Modern British Drama, 3 cr. Shaw's development as a playwright as well as significant movements in British drama since the 1890's, including the Irish Renaissance, recent poetic drama, and the "angry young men." *Prereq.: same as ENGL-300.*

ENGL-324 The Romantic Novel, 3 cr. The nineteenth century novelists from England and the Continent are studied against the great socio-political movements of the age—the French, Russian, and Industrial Revolutions. *Prereq.: same as ENGL-300.*

ENGL-325 Readings in World Literature, 3 cr. Intensive study of fiction and poetry representative of literary movements, historical periods, or thematic concerns. Consult the Schedule of Classes for specific topics. *Prereq.: same as ENGL-300.*

ENGL-326 World Drama I: Aeschylus to Tolstoi, 3 cr. European drama from ancient times to the beginnings of realism against the background of the development of the theatre; representative works from Greece, Italy, Spain, France, Germany, and Russia. *Prereq.: same as ENGL-300.*

ENGL-327 World Drama II: Ibsen to Beckett, 3 cr. European drama of the last century, with emphasis on thematic content and theatrical techniques; representative plays by Ibsen, Strindberg, Chekhov, Pirandello, Brecht, and Beckett, together with statements by playwrights concerning their work. *Prereq.: same as ENGL-300.*

ENGL-328 Seventeenth Century Literature, 3 cr. Studies in seventeenth century literature exclusive of Milton. *Prereq.: same as ENGL-300.*

ENGL-329 Milton, 3 cr. Milton's work and the intellectual milieu of the period. *Prereq.: same as ENGL-300.*

ENGL-330 Shakespeare: Comedies and Romances, 3 cr. Shakespeare's comic writing, from *The Comedy of Errors*, through the romantic comedies and problem comedies to the late romances. *Prereq.: same as ENGL-300.*

ENGL-331 Shakespeare: Tragedies, 3 cr. Shakespeare's tragic works from early experiments in tragedy, e.g., *Romeo and Juliet*, *Richard III*, to the great achievements in tragedy, e.g. *Hamlet*, *Lear*, *Macbeth*. *Prereq.: same as ENGL-300.*

ENGL-332 Elizabethan and Jacobean Drama, 3 cr. Major dramatists, excluding Shakespeare, in Elizabethan and Jacobean drama, 1550 to 1642, including Kyd, Marlowe, Webster, Jonson, Beaumont and Fletcher from the origin of professional and court drama to the closing of the theatres. *Prereq.: same as ENGL-300.*

ENGL-333 Mythological Backgrounds of English and American Literature, 3 cr. Middle-Eastern, Nordic, and Graeco-Roman mythological systems; readings in archetypal interpretation of literature with representative illustrations from fiction, drama, and poetry. *Prereq.: same as ENGL-300.*

ENGL-334 Biblical Backgrounds of English and American Literature, 3 cr. Influence of the Bible, especially the King James version, on the style and content of famous English and American writers. Selected readings from Old and New Testaments and from the writers influenced by them. *Prereq.: same as ENGL-300.*

ENGL-335 Written Communication for Business, 3 cr. Designed primarily for Business and Management majors covering principles and practices of writing required in professional work.

ENGL-336 Writing for Public Relations and Advertising, 3 cr. Application of communication and media theory to the strategy, tactics, and techniques of drafting written copy for advertising and public relations uses. *Prereq.: ENGL-335.*

ENGL-337 Nobel Laureates, 3 cr. Nobel prize winners, 1901 to the present. *Prereq.: same as ENGL-300.*

ENGL-338 The Literature of Japan, 3 cr. An introduction to contemporary Japanese literature. *Prereq.: same as ENGL-300.*

ENGL-339 Madness in Literature, 3 cr. The treatment of madness as a creative process for perceptual growth. *Prereq.: same as ENGL-300.*

ENGL-341 Restoration and Eighteenth Century Literature I, 3 cr. Politics in England leading to the restoration of Charles II; his court; Restoration playwrights, the bawdy Restoration stage and reaction to it; the new sentimental drama; the newspaper and the essay. *Prereq.: same as ENGL-300.*

ENGL-342 Restoration and Eighteenth Century II, 3 cr. Intensive study of contrasts in the Age of Enlightenment; interrelationship of politics and writers; neoclassic literature; beginnings of the novel; eighteenth century criticism and biography. *Prereq.: same as ENGL-300.*

ENGL-348 Poetry of the Victorian Age, 3 cr. Selected Victorian poetry, with consideration of the social background of the period (1837-1910). *Prereq.: same as ENGL-300.*

ENGL-349 Prose of the Victorian Age, 3 cr. Selected non-fiction Victorian prose, with consideration of the social background of the period. *Prereq.: same as ENGL-300.*

ENGL-350 The Victorian Novel, 3 cr. A study of the development of the novel in England from Dickens to Hardy, seen against the contemporary social and literary background. Theme and technique of the novel, methods of publication, major and minor writers. *Prereq.: same as ENGL-300.*

ENGL-351 The English Novel of the Eighteenth Century, 3 cr. The development of the English novel as a genre in the eighteenth century, including such precursors of the novel as Bunyan, Defoe, Lyly and Behn. *Prereq.: same as ENGL-300.*

ENGL-356 Greek Literature in Translation, 3 cr. Greek literature in translation from Homer to Galen including drama, history, poetry, and philosophy of ancient Greece; problems of literary analysis; relationship of the literature to the

social, cultural, and political movements of the periods; relevance of literature of the past to the modern literary experience. *Prereq.: same as ENGL-300.*

ENGL-357 Latin Literature in Translation, 3 cr. Latin literature in translation from Plautus to St. Augustine, including prose, poetry, and drama of ancient Rome; problems of literary analysis; historical and cultural background of the works; relationship of Latin literature to the foundations of Western literature. *Prereq.: same as ENGL-300.*

ENGL-358 Readings in British Literature, 3 cr. Intensive study of selected literary movements, figures, or themes in British literature; each section carries an identifying title. Consult the Schedule of Classes for specific topics. *Prereq.: same as ENGL-300.*

ENGL-359 Independent Study in Literature, 3 cr. An independent study on the tutorial model, initiated at the student's suggestion to an instructor; course content designed in consultation with the instructor. *Prereq.: same as ENGL-300.*

ENGL-360 Detective Fiction, 3 cr. Literary and historical study of the detective story—from Poe and Sherlock Holmes—to Hammett and the present. *Prereq.: same as ENGL-300.*

ENGL-361 Development of the American Novel I, 3 cr. The novel as a developing form from Charles Brockden Brown to Herman Melville; theme and technique in the American novel before the Civil War. *Prereq.: same as ENGL-300.*

ENGL-362 Development of the American Novel II, 3 cr. The novel as a developing form from Mark Twain to William Faulkner and beyond. *Prereq.: same as ENGL-300.*

ENGL-366 Midwestern Literature, 3 cr. A survey of Midwestern literature from frontier days to the present, stressing Mark Twain and the Chicago Renaissance writers. *Prereq.: same as ENGL-300.*

ENGL-371 Studies in Women's Literature, 3 cr. Literature by or about women; includes writing by women, portrayals of female characters, attitudes toward women, and women's roles; other thematic concerns. *Prereq.: same as ENGL-300.*

ENGL-372 Utopian Literature, 3 cr. Utopian literature from ancient to contemporary times featuring works of Plato, Augustine, More, Spenser, Swift, Bellamy, Huxley, and others; works studied both as philosophical speculation and effective literature. *Prereq.: same as ENGL-300.*

ENGL-373 Yiddish Literature in Translation, 3 cr. Yiddish literature and the Yiddish language from its beginning to the present from Eastern Europe and West Germany to the East Side and West Roosevelt Road. *Prereq.: same as ENGL-300.*

ENGL-375 Essentials of Journalism, 3 cr. Newswriting, layout, copy and proofreading, feature and editorial writing, libel, and sound newspaper practices; special problems of the school newspaper. *Prereq.: same as ENGL-300.*

ENGL-376 Advanced Composition: Grammar and Style, 3 cr. Interdependence of rhetoric, grammar, logic, semantics, psychology, and criticism in communication of ideas; practice in various types of writing with focus on students' interest; designed for future teachers of composition. *Prereq.: same as ENGL-300.*

ENGL-378 Twentieth Century Fiction I, 3 cr. Development of the modern novel from Conrad to writers of the 1930s and 1940s against a background of historical and literary movements; emphasis on Conrad, James, Joyce, Lawrence, Faulkner, and Hemingway. *Prereq.: same as ENGL-300.*

ENGL-379 Twentieth Century Fiction II, 3 cr. Development of the novel in English in recent decades against a background of historical and literary movements; includes work of West, Greene, Lowry, Durrell, Bellow, Nabokov, Burgess, Barth, Lessing, Murdoch, Mailer, Updike and Pynchon. *Prereq.: same as ENGL-300.*

ENGL-380 Multi-Cultural Literature in America, 3 cr. Designed for future teachers of English, the multi-genre course provides students with an awareness of representative literature from the various ethnic cultures that are a part of American life. *Prereq.: same as ENGL-300.*

ENGL-382 Creative Writing: Drama I, 3 cr. Readings to help students develop skills in writing various forms of drama. *Prereq.: same as ENGL-300.*

ENGL-383 Creative Writing: Drama II, 3 cr. Readings to help students demonstrate mastery in various forms of drama. *Prereq.: same as ENGL-300.*

ENGL-384 Creative Writing: Poetry I, 3 cr. Students write poetry which is discussed and critiqued in class by instructor and students. *Prereq.: same as ENGL-300.*

ENGL-385 Creative Writing: Poetry II, 3 cr. Students write poetry which is discussed and critiqued in class by instructor and students. *Prereq.: same as ENGL-300.*

ENGL-386 Creative Writing: Fiction I, 3 cr. Readings to help students develop skills in writing prose fiction. *Prereq.: same as ENGL-300.*

ENGL-387 Creative Writing: Fiction II, 3 cr. Readings to help students write extensively in various forms of prose fiction. *Prereq.: same as ENGL-300.*

ENGL-389 Contemporary Poetry, 3 cr. Development of poetry in English in recent decades against a background of historical and literary movements; poets studied include W.C. Williams, Marianne Moore, W. H. Auden, Dylan Thomas, Theodore Roethke, Robert Lowell, John Berryman, Philip Larkin, Ted Hughes, Gwendolyn Brooks, Sylvia Plath, and Allen Ginsberg. *Prereq.: same as ENGL-300.*

ENGL-390 Young Adult Novel, 3 cr. Advanced study in literature for young adults, grades 7-10. Evaluation and selection of recent books in the area as well as the history of the genre. Criteria for selection. Book lists, indexes, professional literature in the field. Individual work on problem of special interest. *Prereq.: same as ENGL-300.*

ENGL-391 Children's Literature, 3 cr. Preparation for effective teaching of literature in the elementary school; wide reading of books for young children; story selection and story telling; authors and illustrators of children's books; classroom methods of stimulating creative expression; individual and group reading guidance. *Prereq.: same as ENGL-300.*

ENGL-392 Journalism I, 3 cr. A practical course emphasizing journalism skills, including writing news and feature stories, opinions, editorials, copyediting, reporting and

interviewing. **Prereq.:** ENGL-101, equivalency on ENGL. Placement Test, or consent of instructor.

ENGL-393 Journalism II, 3 cr. A course involving faculty supervised work on the school newspaper; for students interested in gaining practical journalistic experience. **Prereq.:** Journalism I or equivalent.

ENGL-399 The Literature of Aging, 3 cr. By reading and discussing poems, short stories, drama, and essays containing aging or aged protagonists, students are led to tentative conclusions regarding: physical characteristics of the aging process; relationship of the elderly with the young; interaction of aging spouses in marriage; opportunities for growth during aging. Oral history of and interviews with the aging will be encouraged. **Prereq.:** same as ENGL-300.

ENGL-421 The Metaphysical Poets, 3 cr. The metaphysical tradition in seventeenth century poetry and its impact on modern poetry, including works of Donne, Herbert, Crashaw, Vaughan, and Traherne and critical studies of Johnson, Grierson, Eliot, Leavis, Williamson, and others. **Prereq.:** graduate standing, admission to a degree program in literature, or written consent of instructor.

ENGL-430 Studies in Literary Criticism, 3 cr. A study of some of the central problems and issues of contemporary criticism, as exemplified by the writings of major theorists. **Prereq.:** same as ENGL-421.

ENGL-431 Bibliography and Methods of Literary Study, 3 cr. Materials, methods, and tools of literary research; use of libraries; preparation of scholarly papers. **Prereq.:** same as ENGL-421.

ENGL-433 Seminar in Composition Theory, 3 cr. An extensive examination of current composition methodologies with emphasis upon the eclectic needs of the composition student. **Prereq.:** graduate standing.

ENGL-434 Seminar in Basic Writing Theory, 3 cr. A survey of types of students in basic writing classes, a review of placement tests for identifying levels of writing competency, and a careful examination of various basic writing methodologies. **Prereq.:** graduate standing; admission to a graduate program in English or linguistics, or written consent of the instructor.

ENGL-435 Diagnosis and Remediation of Writing Problems, 3 cr. Theoretical background on evaluating student writing, as well as practical training in how to diagnose and remediate problems with grammar and content at the secondary and college level. **Prereq.:** graduate standing; admission to a graduate program in English or linguistics, or written consent of instructor.

ENGL-440 Malory, 3 cr. Examination of Sir Thomas Malory's *Morte Darthur* concentrating on structure and interpretation, while considering current controversies over authorship and the state of the text; attention to the position of the work in the development of the Arthurian legend and in the context of the fifteenth century. **Prereq.:** same as ENGL-421.

ENGL-441 Seminar in Sixteenth Century Literature, 3 cr. Advanced study of the work of a single author; individual assignments culminating in a term essay; discussions of the investigations. Consult the Schedule of Classes for specific topics. **Prereq.:** same as ENGL-421.

ENGL-442 Seminar in Seventeenth Century Literature, 3 cr. (See ENGL-441 for description.)

ENGL-443 Seminar in Eighteenth Century Literature, 3 cr. (See ENGL-441 for description.)

ENGL-444 Seminar in Romantic Literature, 3 cr. (See ENGL-441 for description.)

ENGL-445 Seminar in Victorian Literature, 3 cr. (See ENGL-441 for description.)

ENGL-446 Seminar in Contemporary English Literature, 3 cr. (See ENGL-441 for description.)

ENGL-447 Seminar in Contemporary American Literature, 3 cr. (See ENGL-441 for description.)

ENGL-448 Seminar in Nineteenth Century American Literature, 3 cr. (See ENGL-441 for description.)

ENGL-449 Studies in American Literature, 3 cr. Advanced study of selected American writers. Consult the Schedule of Classes for specific topics. **Prereq.:** same as ENGL-421.

ENGL-450 Studies in English Literature, 3 cr. Advanced study of selected English writers. Consult the Schedule of Classes for specific topics. **Prereq.:** same as ENGL-421.

ENGL-453 Thesis Seminar: Literature, 6 cr. Guidance of students conducting research and writing a thesis to fulfill requirements for the M.A. in Literature. **Prereq.:** acceptance to master's degree candidacy in literature.

ENGL-454 Seminar in World Literature, 3 cr. Advanced study of a selected writer(s) in World Literature. Consult the Schedule of Classes for specific topics. **Prereq.:** same as ENGL-441.

ENGL-455 Studies in World Literature, 3 cr. Advanced study of selected writers in World literature. Consult the Schedule of Classes for specific topics. **Prereq.:** same as ENGL-421.

ENGL-456 William Blake, 3 cr. Intensive study of the works of Blake, noting the religious, political and social beliefs, opinions and doctrines his works evaluate and challenge. **Prereq.:** same as ENGL-421.

ENGL-457 The Poetry and Prose of Shelley, 3 cr. An intensive study of the poetry and prose works of Shelley in the light of his social, religious and political milieu and with the aid of pertinent scholarship regarding the poet. **Prereq.:** same as ENGL-421.

ENGL-458 Troilus and Criseyde, 3 cr. Study of the development of the legend of Troilus from a brief mention in *The Iliad* through the dramatic treatment in 12th century chronicles and Boccaccio's great romance to Chaucer's major verse 'novel' and Shakespeare's enigmatic drama. **Prereq.:** same as ENGL-421.

ENGL-459 Dante, 3 cr. Study of the poetry (in translation) of the major Italian poet of the Middle Ages and Renaissance concentrating on the *Vita Nuova* and the *Divine Comedy* with consideration of the theological, philosophical and cultural sources of Dante's work. **Prereq.:** same as ENGL-421.

ENGL-461 Dostoevski: The Major Works, 3 cr. Dostoevski's major works (such as *Notes from the Underground*, *Crime and Punishment*, *The Idiot*, *The Brothers Karamazov*) in relation to the social, political, and religious issues which concerned the writer. **Prereq.:** same as ENGL-421.

ENGL-469 Seminar in Southern Literature, 3 cr. Intensive reading of twentieth-century Southern literature ex-

clusive of Faulkner with emphasis on the sociological and psychological aspects of the literature as they mirror life in America's South. **Prereq.:** same as ENGL-421.

ENGL-470 Seminar in Faulkner, 3 cr. Intensive reading of the short fiction and novels of William Faulkner with specific attention on his development as a novelist and his place among twentieth century American authors. **Prereq.:** same as ENGL-421.

ENGL-471 Nineteenth Century Poetic Narrative, 3 cr. Study of the longer works of the 19th Century British poets. **Prereq.:** same as ENGL-421.

ENGL-472 Georgians and Edwardians, 3 cr. Study of English literature during the first part of the twentieth century. **Prereq.:** same as ENGL-421.

ENGL-473 Aesthetes and Decadents, 3 cr. Examination of the aesthetic movement at the turn of the century. **Prereq.:** same as ENGL-421.

ENGL-474 Seminar in Byron, 3 cr. Close examination of the poetic canon of Lord Byron. **Prereq.:** same as ENGL-421.

ENGL-475 Seminar in Keats, 3 cr. Close examination of the poetic canon of John Keats. **Prereq.:** same as ENGL-421.

FOREIGN LANGUAGES AND LITERATURES

Lucrecia Artalejo, Ph.D., Assistant Professor of Spanish
Flora Breidenbach, Ph.D., Assistant Professor of Spanish
Bonnie Busse, Ph.D., Professor of Spanish
Nannette Coleman, M.A., Assistant Professor of German
Serafima Friedman, M.A., Assistant Professor of Russian
Battista Galassi, Ph.D., Professor of Spanish
Rodrigo Gonzalez, M.A., Assistant Professor of Spanish
Julio Jolly, M.A., Assistant Professor of Spanish
Dorette Klein, M.A., Assistant Professor of French
Mary Ellen McGoey, Ph.D., Assistant Professor of French
Valeska Najera, Ph.D., Assistant Professor of Spanish
Edgardo Pantigoso, Ph.D., Professor of Spanish, Acting Chairperson
Angelina Pedroso, LL.D., Associate Professor of Spanish
Henry Russell, Ph.D., Associate Professor of French

Foreign language study perfects communication skills, acquaints students with masterpieces of literature, and develops an understanding of the principal differences and similarities between foreign and American cultures. Students find that a foreign language background enhances their career chances in any chosen field.

The Department of Foreign Languages and Literatures offers courses leading to the degree of Bachelor of Arts in French and in Spanish. In Spanish, the Department offers graduate courses that may count towards a Master of Arts degree awarded by Roosevelt University. The Department offers minors in French, German, Italian, Russian and Spanish.

The Department offers (1) language courses, which count towards the minor but not towards the major, (2) courses on literature and culture taught in the target language, which count towards both the major and the minor, and (3) courses on literature and culture taught in English, which do not count towards major requirements; one such course may count towards minor requirements, however.

All French and Spanish majors are assigned to a departmental advisor and are urged to meet with him or her on a regular basis. Details are available in the departmental office.

In recognition of students who reach academic excellence, the department sponsors three national honor societies: Gamma Kappa Alpha (National Italian Honor Society), Pi Delta Phi (National French Honor Society) and Sigma Delta Phi (National Spanish Honor Society).

Entering freshmen who have taken two years or more of a foreign language in high school may be awarded college credit. A placement test is mandatory. Interested students should contact the Department before registering for their first term at UNI or during their first term at the latest.

UNDERGRADUATE PROGRAMS

Major in French for the Bachelor of Arts Degree

Required Courses:

FL-FREN-220	French Conversation I.....	3 cr.
FL-FREN-221	French Grammar and Composition I.....	3 cr.
FL-FREN-222	French Conversation II.....	3 cr.
FL-FREN-223	French Grammar and Composition II.....	3 cr.
FL-FREN-300	Introduction to French Civilization	3 cr.
FL-FREN-320	Introduction to French Literature	3 cr.
Electives		15 cr.
		Total 33 cr.

Students wishing to be certified for teaching French in secondary schools must complete FL-FREN-315 Applied French Linguistics and then enroll in FL-300 Foreign Language Clinical Experience in the Secondary School, concurrently with the foreign language methods course. FL-FREN-315 may count as an elective in the major.

Further certification requirements are listed in the Secondary Education section of this catalog.

Major in Spanish for the Bachelor of Arts Degree

Required Courses: For non-native speakers of Spanish

FL-SPAN-220	Spanish Conversation I.....	3 cr.
FL-SPAN-224	Intensive Reading of Spanish	3 cr.
FL-SPAN-230	Spanish Conversation II	3 cr.
FL-SPAN-240	Extensive Reading in Spanish	3 cr.
FL-SPAN-312	Spanish Conversation III.....	3 cr.
FL-SPAN-317	Intensive Writing in Spanish.....	3 cr.
FL-SPAN-329	Introduction to Spanish-American and Spanish Literature	3 cr.

FL-SPAN-331 Hispanic World Cultures.....	3 cr.
Electives	9 cr.
Total	33 cr.

Required Courses: For native speakers of Spanish

FL-SPAN-224 Intensive Reading of Spanish	3 cr.
FL-SPAN-228 Composition for the Spanish-Speaking I	3 cr.
FL-SPAN-240 Extensive Reading in Spanish	3 cr.
FL-SPAN-250 Composition for the Spanish-Speaking II	3 cr.
FL-SPAN-317 Intensive Writing in Spanish.....	3 cr.
FL-SPAN-329 Introduction to Spanish-American and Spanish Literature.....	3 cr.
FL-SPAN-331 Hispanic World Cultures.....	3 cr.
Electives	12 cr.
Total	33 cr.

Students wishing to be certified for teaching Spanish in secondary schools must complete FL-SPAN-319 Applied Spanish Linguistics and FL-SPAN-320 Spanish Grammar and How to Teach It and then enroll in FL-300 Foreign Language Clinical Experience in the Secondary School, concurrently with the foreign language methods course. FL-SPAN-319 and FL-SPAN-320 may count as electives in the major.

Further certification requirements are listed in the Secondary Education section of this catalog.

Minor in Foreign Languages for the Bachelor of Arts Degree in Elementary Education**Required Courses:**

18 credit hours in one foreign language	
9 of which must be at the 300-level	18 cr.
6 hours from each of two of the following areas:	12 cr.
English	
Linguistics	
Speech and Performing Arts	
Total	30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

Minors in French, German, Italian, Russian, Spanish

A minor consists of 21 credit hours to be selected in consultation with a departmental advisor. Transfer students who minor in a foreign language must take a minimum of 9 credit hours at Northeastern. Availability of advanced courses in German, Italian and Russian depends on student demand.

GRADUATE PROGRAM**Master of Arts in Spanish****General Information:**

Under a cooperative agreement between Roosevelt University and Northeastern Illinois University, students in the Department of Foreign Languages and Literatures at Northeastern may continue studies leading to a Master of Arts degree in Spanish awarded by Roosevelt University. A maximum of 12 credit hours from Northeastern chosen in consultation with the graduate advisor will be accepted toward this degree. Students must apply to and be accepted by Roosevelt University, and all remaining credit hours must be completed there.

Admission to the Program:

All applicants must meet the admission requirements of the Graduate Division of Roosevelt University. Northeastern Illinois University students wishing to apply for admission to this program should obtain application forms and other pertinent information from the Department.

COURSE OFFERINGS

FL-300 Foreign Language Clinical Experience in the Secondary School, 3 cr. Supervised direct involvement in the instructional process for students taking the academic major methods course; four hours of direct involvement in the instructional process; four hours of clinical experience per week. *Prereq.:* must be taken concurrently with academic major methods course or consent of instructor.

FL-302 Introduction to Teaching Foreign Languages, 3 cr. The nature of language and language-learning processes; demonstration of specific organizational patterns and teaching methods with emphasis on designing, presenting and evaluating specific classroom procedures in the light of recent developments in linguistics, psychology, psycholinguistics, curriculum, teaching materials, and technology. *Prereq.:* completion of 9 credit hours in major field at the 200 and/or 300-level or consent of instructor.

Elementary Foreign Language Methods

FL-EFLM-372 Methods of Teaching Foreign Language in Elementary Schools, 3 cr. Fundamental audio-lingual skills presented and practiced in accordance with linguistic principles; practical application of materials used in the modern foreign language classroom. *Prereq.:* twenty-one credit hours in major field at the 200 and/or 300-level.

French

FL-FREN-101 French I, 3 cr. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-FREN-102 French II, 3 cr. Continuation of FL-FREN-101. *Prereq.:* FL-FREN-101 or equivalent.

FL-FREN-103 French III, 3 cr. Continuation of FL-FREN-102. *Prereq.:* FL-FREN-102 or equivalent.

FL-FREN-110 French for Travel I, 3 cr. Development of the necessary minimum skills to communicate in French as a tourist, businessman, or student.

FL-FREN-202 Intermediate French, 3 cr. Continuation of FL-FREN-103. Completes the study of the basic elements of French. Particular emphasis on conversation and introduction to reading. *Prereq.:* FL-FREN-103 or consent of instructor.

FL-FREN-210 Reading Modern French, 3 cr. Practice in reading modern texts of current interest and moderate difficulty. *Prereq.:* FL-FREN-202 or consent of instructor.

FL-FREN-220 French Conversation I, 3 cr. Development of oral-aural communication skills with emphasis on everyday situations. Conducted in French. *Prereq.:* FL-FREN-202 or consent of instructor.

FL-FREN-221 French Grammar and Composition I, 3 cr. Overview of grammar with emphasis on writing skills. *Prereq.:* FL-FREN-202 or consent of instructor.

FL-FREN-222 French Conversation II, 3 cr. Continuation of FL-FREN-220. *Prereq.:* FL-FREN-220.

FL-FREN-223 French Grammar and Composition II, 3 cr. Continuation of FL-FREN-221. *Prereq.:* FL-FREN-221.

FL-FREN-230 French Phonetics, 3 cr. Presentation, classification, and analysis of the sounds of the French language with special emphasis on techniques and drills leading to habits of correct pronunciation. Conducted in French. *Prereq.:* FL-FREN-202 or consent of instructor.

FL-FREN-300 Introduction to French Civilization, 3 cr. Panoramic view of the history of France and her civilization from Gallo-Roman times to the present. Conducted in French. *Prereq.:* FL-FREN-223.

FL-FREN-313 French Grammar and Stylistics, 3 cr. Identification, analysis, and use of French structure; extensive exercises in grammatical and logical analysis. Conducted in French. *Prereq.:* FL-FREN-223.

FL-FREN-315 Applied French Linguistics, 3 cr. A systematic comparison of French and English. Application of teaching techniques related to modern theories of language learning. Required for secondary school teacher certification. *Prereq.:* twenty-one credit hours in French at the 200 and/or 300-level.

FL-FREN-320 Introduction to French Literature, 3 cr. Outline of French literature; outstanding authors and their works from the Middle Ages to the present. Conducted in French. *Prereq.:* FL-FREN-223.

FL-FREN-321 Seventeenth Century French Literature, 3 cr. Study of the principal philosophical and literary movements of the literature of classicism. Conducted in French. *Prereq.:* FL-FREN-320 or consent of instructor.

FL-FREN-322 Eighteenth Century French Literature, 3 cr. Study of representative works of playwrights, philosophers, and novelists of Age of Enlightenment. Conducted in French. *Prereq.:* FL-FREN-320 or consent of instructor.

FL-FREN-323 Nineteenth Century French Literature, 3 cr. Overview novels, poetry, and plays of major authors from romanticism to naturalism and symbolism. Conducted in French. *Prereq.:* FL-FREN-320 or consent of instructor.

FL-FREN-324 Twentieth Century French Literature, 3 cr. Survey of the principal currents in French literature

since the turn of the century. Conducted in French. *Prereq.:* FL-FREN-320 or consent of the instructor.

FL-FREN-354 Le Theatre Classique, 3 cr. Theater workshop. An in-depth study of a major drama of the seventeenth century followed by its production and performance. Conducted in French. *Prereq.:* FL-FREN-320 or consent of instructor.

FL-FREN-360 French Seminar, 3 cr. Study of selected topics including language, literature and culture. Consult the Schedule of Classes for specific topics. Conducted in French. *Prereq.:* consent of instructor.

German

FL-GER-101 German I, 3 cr. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-GER-102 German II, 3 cr. Continuation of FL-GER-101. *Prereq.:* FL-GER-101 or equivalent.

FL-GER-103 German III, 3 cr. Continuation of FL-GER-102. Completes the study of the basic elements of German. *Prereq.:* FL-GER-102 or equivalent.

FL-GER-202 German Grammar and Composition I, 3 cr. Overview of grammar with emphasis on writing skills. *Prereq.:* FL-GER-103 or equivalent.

FL-GER-203 German Grammar and Composition II, 3 cr. Continuation of FL-GER-202. *Prereq.:* FL-GER-202.

FL-GER-205 German Conversation I, 3 cr. Development of oral-aural communication skills with emphasis on everyday situations. Conducted in German. *Prereq.:* FL-GER-103 or equivalent.

FL-GER-207 German Conversation II, 3 cr. Continuation of FL-GER-205. Conducted in German. *Prereq.:* FL-GER-205.

FL-GER-218 History and Culture of German-Speaking Countries, 3 cr. Overview of the history and culture of Germany (FRG and GDR) from 800 A.D. to the present. Conducted in German. *Prereq.:* FL-GER-207.

FL-GER-305 Introduction to German Literature, 3 cr. Survey of German literature from the thirteenth century to the present. Conducted in German. *Prereq.:* FL-GER-207.

FL-GER-306 German Seminar, 3 cr. Study of selected topics including language, literature, and culture. Conducted in German. Consult the Schedule of Classes for specific topics. *Prereq.:* consent of instructor.

Greek

FL-GREK-101 Modern Greek I, 3 cr. Development of basic skills in listening, speaking, reading and writing. Cultural appreciation.

FL-GREK-102 Modern Greek II, 3 cr. Continuation of FL-GREK-101. *Prereq.:* FL-GREK-101 or equivalent.

FL-GREK-103 Modern Greek III, 3 cr. Continuation of FL-GREK-102. Completes the study of the basic elements of Greek. *Prereq.:* FL-GREK-102 or equivalent.

FL-GREK-202 Intermediate Modern Greek, 3 cr. Grammar review, reading, composition; particular emphasis on conversation. *Prereq.:* FL-GREK-103 or equivalent.

Italian

FL-ITAL-101 Italian I, 3 cr. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-ITAL-102 Italian II, 3 cr. Continuation of FL-ITAL-101.

Prereq.: FL-ITAL-101 or equivalent.

FL-ITAL-103 Italian III, 3 cr. Continuation of FL-ITAL-102. Completes the study of the basic elements of Italian. *Prereq.: FL-ITAL-102 or equivalent.*

FL-ITAL-202 Intermediate Italian, 3 cr. Grammar review, reading, composition; particular emphasis on conversation. *Prereq.: FL-ITAL-103 or equivalent.*

FL-ITAL-203 Introduction to Italian Culture, 3 cr. Survey of Italian culture and its impact on Western civilization. Introduction to modern Italy: institutions, customs, and life. Brief look at the Italian-American Community. Conducted in English.

FL-ITAL-210 Italian Conversation and Composition I, 3 cr. Development at the advanced level of oral-aural and written communication skills. *Prereq.: FL-ITAL-202 or equivalent.*

FL-ITAL-220 Italian Conversation and Composition II, 3 cr. Continuation of FL-ITAL-210. *Prereq.: FL-ITAL-210 or equivalent.*

FL-ITAL-303 Introduction to Italian Literature, 3 cr. Study, analysis, and esthetic appreciation of selected literary works from the 13th century to the present. Conducted in Italian. *Prereq.: FL-ITAL-210.*

FL-ITAL-304 Italian Seminar, 3 cr. Study of selected topics including language, literature, and culture. Conducted in Italian. Consult the Schedule of Classes for specific topics.

Prereq.: consent of instructor.

Polish

FL-POL-101 Polish I, 3 cr. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-POL-102 Polish II, 3 cr. Continuation of FL-POL-101.

Prereq.: FL-POL-101 or equivalent.

FL-POL-103 Polish III, 3 cr. Continuation of FL-POL-102. Completes the study of the basic elements of Polish. *Prereq.: FL-POL-102 or equivalent.*

Russian

FL-RUSS-101 Russian I, 3 cr. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-RUSS-102 Russian II, 3 cr. Continuation of FL-RUSS-101. *Prereq.: FL-RUSS-101 or equivalent.*

FL-RUSS-103 Russian III, 3 cr. Completes the study of the basic elements of Russian. *Prereq.: FL-RUSS-102 or equivalent.*

FL-RUSS-204 Introduction to Russian Civilization, 3 cr. Survey of Russian culture (11th-20th centuries) with reference to art, architecture, theatre, music, philosophy, and education. Conducted in English.

FL-RUSS-210 Russian Conversation and Composition I, 3 cr. Development at the advanced level of oral and written communication skills. *Prereq.: FL-RUSS-103.*

FL-RUSS-220 Russian Conversation and Composition II, 3 cr. Continuation of FL-RUSS-210. *Prereq.: FL-RUSS-210.*

FL-RUSS-230 Intensive Reading of Russian, 3 cr. Development of comprehension through reading of a wide variety of material from fiction, science, texts, journals, and newspapers. *Prereq.: FL-RUSS-103.*

FL-RUSS-313 Introduction to Russian Literature, 3 cr. Survey and critical analysis of selected masterpieces from the 19th century to the present. Conducted in Russian.

Prereq.: consent of instructor.

FL-RUSS-314 Advanced Conversation in Russian, 3 cr. Development of communicative skills on an advanced level. Discussion of cultural material dealing with contemporary Russia. Conducted in Russian. *Prereq.: FL-RUSS-220.*

FL-RUSS-316 Seminar in Russian, 3 cr. Study of selected topics including language, literature, and culture. Conducted in Russian. Consult the Schedule of Classes for specific topics. *Prereq.: consent of instructor.*

Spanish

FL-SPAN-101 Spanish I, 3 cr. (For non-native speakers of Spanish.) Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.

FL-SPAN-102 Spanish II, 3 cr. Continuation of FL-SPAN-101. *Prereq.: FL-SPAN-101 or equivalent.*

FL-SPAN-103 Spanish III, 3 cr. Continuation of FL-SPAN-102. Completes the study of the basic elements of Spanish. *Prereq.: FL-SPAN-102 or equivalent.*

FL-SPAN-123 Accelerated Spanish I-II-III, 9 cr. Accelerated study of Spanish, covering FL-SPAN-101, FL-SPAN-102, and FL-SPAN-103.

FL-SPAN-202 Intermediate Spanish, 3 cr. Review of grammar. Short readings and practice in writing brief compositions. Exercises in oral communication. *Prereq.: FL-SPAN-103 or equivalent.*

FL-SPAN-220 Spanish Conversation I, 3 cr. Development of basic conversational skills with emphasis on everyday situations. Conducted primarily in Spanish. *Prereq.: FL-SPAN-103 or consent of instructor.*

FL-SPAN-224 Intensive Reading of Spanish, 3 cr. Developing comprehension by increasing vocabulary and enhancing speed in reading Spanish. Conducted in Spanish.

Prereq.: FL-SPAN-103 or equivalent.

FL-SPAN-228 Composition for the Spanish-Speaking I, 3 cr. Basic instruction in the rules of Spanish orthography. Conducted in Spanish. *Prereq.: consent of instructor.*

FL-SPAN-230 Spanish Conversation II, 3 cr. Continuation of FL-SPAN-220 with emphasis on spontaneous conversation. Conducted in Spanish. *Prereq.: FL-SPAN-220.*

FL-SPAN-240 Extensive Reading in Spanish, 3 cr. Reading of a wide variety of longer passages with emphasis on general comprehension. Conducted in Spanish. *Prereq.: FL-SPAN-224.*

FL-SPAN-250 Composition for the Spanish-Speaking II, 3 cr. Continuation of FL-SPAN-228. Instruction in Spanish

grammar for the Spanish-speaking student. Conducted in Spanish. *Prereq.: FL-SPAN-228.*

FL-SPAN-312 Spanish Conversation III, 3 cr. Continuation of FL-SPAN-230. Mastery of various speaking skills leading toward communicative competence. Conducted in Spanish. *Prereq.: FL-SPAN-230.*

FL-SPAN-317 Intensive Writing in Spanish, 3 cr. Preparation of term papers: library use, bibliography, and research. Conducted in Spanish. *Prereq.: FL-SPAN-240 and for the Spanish-speaking, FL-SPAN-250.*

FL-SPAN-319 Applied Spanish Linguistics, 3 cr. Linguistic principles and their application in the preparation of teaching materials and of microlessons. *Prereq.: consent of instructor.*

FL-SPAN-320 Spanish Grammar and How to Teach It, 3 cr. Review and analysis of basic grammar with emphasis on the presentation of structure. *Prereq.: FL-SPAN-224, FL-SPAN-230 or FL-SPAN-250.*

FL-SPAN-324 Advanced Composition, 3 cr. Advanced study of Spanish composition using complex grammatical structures with special attention to style. Conducted in Spanish. *Prereq.: FL-SPAN-312 or FL-SPAN-317.*

FL-SPAN-325 Spanish Seminar, 3 cr. Study of selected topics including language, literature, and culture. Conducted in Spanish. Consult the Schedule of Classes for specific topics. *Prereq.: consent of instructor.*

FL-SPAN-329 Introduction to Spanish-American and Spanish Literature, 3 cr. Overview of literary periods and significant trends in Spanish-American and Spanish Literature. Survey of major writers and their principle works. Conducted in Spanish. *Prereq.: FL-SPAN-312 or FL-SPAN-317 or consent of instructor.*

FL-SPAN-330 La Cultura Hispanoamericana a traves de la Musica, 3 cr. Study of the various aspects of Latin American music as they relate to Spanish American literature and culture. Conducted in Spanish. *Prereq.: FL-SPAN-312.*

FL-SPAN-331 Hispanic World Cultures, 3 cr. Study of the various aspects of the cultures of the Hispanic World. Conducted in Spanish. *Prereq.: FL-SPAN-312 or FL-SPAN-317.*

FL-SPAN-332 Generacion de 1898, 3 cr. Analysis of the general character of the period called Generation of 1898 in Spanish Literature. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-333 The Contemporary Spanish-American Novel, 3 cr. The Spanish-American novel through several literary movements such as Modernism, Regionalism, and Social Protest. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-334 La Literatura Negrista, 3 cr. The study of Black literature of Spanish America. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-352 Puerto Rican Literature, 3 cr. Survey of Puerto Rican literature from 1650 to the present; principal literary movements in novel, short story, poetry and drama. Conducted in Spanish. *Prereq.: FL-SPAN-312 or FL-SPAN-317 or consent of instructor.*

FL-SPAN-354 Spanish-American Literature to 1888, 3 cr. Reading and study of Spanish-American Literature

from its beginning up to and including the Romantic period. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-356 Realism and Naturalism in Spanish-American Literature, 3 cr. Reading and study of Spanish-American literature emphasizing "criollismo", "indianista", and Gaucho literature. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-357 Prose of the Golden Age, 3 cr. Reading and study of the literary prose of the Spanish Golden Age. Emphasis on Don Quixote and the Picaresque novel. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-358 El Modernismo, 3 cr. Reading and study of the prose and poetry of the Modernist authors of Spanish America. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-359 Spanish Literature of the 19th Century, 3 cr. Study of Romanticism, Realism, and Naturalism in Spain. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-363 The Generation of 1927, 3 cr. Works of the principal figures of the Generation of 1927. Conducted in Spanish. *Prereq.: FL-SPAN-329 or consent of instructor.*

FL-SPAN-364 The Spanish-Americans of Chicago, 3 cr. Contributions of Spanish-Americans to Chicago and their impact on the city. Conducted in Spanish. *Prereq.: FL-SPAN-312 or FL-SPAN-317 or consent of instructor.*

FL-SPAN-365 Spanish-American Seminar, 3 cr. Study of selected topics including language, literature, and culture. Conducted in Spanish. Consult the Schedule of Classes for specific topics. *Prereq.: consent of instructor.*

FL-SPAN-409 Seminar in Twentieth Century Spanish-American Literature, 3 cr. Advanced study of a literary movement, genre, or author. Conducted in Spanish. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing, admission to the Roosevelt University-Northeastern Illinois University Master of Arts Program or written consent of instructor.*

GEOGRAPHY AND ENVIRONMENTAL STUDIES

Dale Blahna, Ph.D., Assistant Professor
Robert Easton, M.A., Assistant Professor
Erick Howenstine, Ph.D., Assistant Professor
William Howenstine, Ph.D., Professor
Karl Kriesel, Ph.D., Professor
William Millard, Ph.D., Associate Professor
Musa Qutub, Ph.D., Professor
Barbara J. Winston, Ph.D., Professor, Chairperson

The Department of Geography and Environmental Studies offers courses leading to the degrees of Bachelor of Arts and Master of Arts. The programs focus on professional geography and environmental studies, teacher training, research and computer skills, personal enrichment for the student, and may complement the study of other disciplines.

NOTE: All Geography and Environmental Studies majors must select their elective courses with the approval of their program advisor.

UNDERGRADUATE PROGRAMS

Major in Geography for the Bachelor of Arts Degree

Requirements:

Global Geography: (Select one).....	3 cr.
G&ES-104 World Geography.....	3 cr.
G&ES-105 Contemporary Issues.....	3 cr.
Physical Environment:.....	6 cr.
G&ES-205 Climate, Soils and Vegetation.....	3 cr.
G&ES-206 Landforms.....	3 cr.
Human Environment: (Select two).....	6 cr.
G&ES-212 Economic Geography.....	3 cr.
G&ES-213 Cultural Geography.....	3 cr.
G&ES-317 Urban Geography.....	3 cr.
Geographic Techniques.....	
Graphic Techniques:.....	6 cr.
G&ES-322 Aerial Photo Interpretation.....	3 cr.
G&ES-376 Cartography I.....	3 cr.
Research Techniques: (Select two).....	6 cr.
G&ES-351 Statistics for Geographers and Earth Scientists.....	3 cr.
G&ES-374 Research Methods in Environmental Perception.....	3 cr.
G&ES-380 Field Methods.....	3 cr.
Approved electives in specialization.....	12 cr.
Total	39 cr.

Areas of specialization are offered within this program, such as economic geography, socio-cultural geography, physical geography, urban geography, regional geography, resource development and conservation, geographic techniques, and geographic education.

NOTE: Students wishing to be certified for teaching geography in secondary schools should see the Department's program advisor and should consult the Secondary Education section of this catalog.

Major in Environmental Studies for the Bachelor of Arts Degree

Environmental studies is a multi-disciplinary, problem-oriented major designed to give students knowledge of and solutions to environmental problems. Students focus on one of two areas: environmental interpretation/education (option 1) or the broader area of environmental planning/management (option 2). Students in option 1 will qualify for careers as naturalists with parks and other outdoor agencies and environmental educators in camps and social service agencies.

The option may also be used as an area of specialization for preservice and certified teachers. Students in option 2 may specialize in one of the following areas of environmental planning and management: water resources; solid waste; energy resources; international resource development; and environmental policy and administration.

To earn a Bachelor of Arts in Environmental Studies, students must complete at least 15 credit hours of core requirements and 30 credit hours of approved course work from the natural sciences, social sciences and other relevant fields.

Required Courses:

G&ES-150 Introduction to Environmental Studies.....	3 cr.
G&ES-318 Conservation of Natural Resources.....	3 cr.
G&ES-386 Internship.....	6 cr.
G&ES-374 Research Methods in Environmental Perception.....	3 cr.
Approved Electives.....	30 cr.
Total	45 cr.

NOTE: Electives should be selected in consultation with a major advisor in the Department of Geography and Environmental Studies and a co-advisor from a department related to the student's career interest.

Minor in Geography and Environmental Studies (18 cr. hrs.)

The minor is designed to complement students' career or academic interests. Areas of possible emphasis include environmental studies, general geography, physical geography, regional geography, and urban geography. All minors must select their courses with the approval of their departmental advisor.

GRADUATE PROGRAMS

Master of Arts in Geography and Environmental Studies

The Master of Arts degree program is designed to provide advanced analysis of spatial and environmental systems expressed as patterns and processes. Included in the course work are ecological studies of human-environmental interrelations, studies of rapidly changing landscapes emphasizing the synthesis of diverse but interrelated phenomena, locational studies concerning the geometrics of movement, size, shape and distance, and studies of environmental resources in terms of their interpretation, development, and use.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Applicants must have at least an undergraduate minor in geography and/or environmental studies. Students lacking this level of preparation will be required, at the discretion of

the department, to remedy any deficiencies noted in their background. The Graduate Record Examination may be required.

Degree Requirements:

All candidates must complete a final written and/or oral examination covering their chosen area of specialization as well as knowledge of general geography and/or environmental studies.

Students may write a thesis under the supervision of their program advisor. The thesis topic must be chosen in advance in consultation with the program advisor. Six hours - which count towards the elective requirements - are granted for a thesis through the course G&ES-431 Thesis Seminar: Geography and Environmental Studies. An oral defense of the thesis is required.

Students electing not to complete a thesis must instead complete two 400-level courses which will count towards the elective requirements, and submit a research paper written under the supervision of their program advisor. The paper topic must be chosen in advance in consultation with the program advisor.

SEQUENCE I: Geography and Environmental Studies

This sequence is designed to train personnel for positions in education, industry, government, environmental planning and management, environmental interpretation, and other areas where geographers and environmental professionals are needed.

Requirements include a total of 33 credit hours in geography and/or environmental studies of which at least 18 credit hours must be earned at the 400-level. Each student must choose an area of specialization in one of six fields: cultural geography, urban geography, physical geography, economic geography, geography or environmental education, or environmental studies, and demonstrate competence in one other of these fields. Programs should be planned in consultation with an assigned faculty advisor.

Required Courses:

G&ES-442 Geographic Problems in Quantitative Measurements, or one other approved statistics course.....	3 cr.
G&ES-322 Aerial Photographic Interpretation or G&ES-376 Cartography I or G&ES-377 Cartography II or G&ES-382 Remote Sensing.....	3 cr.
G&ES-411 Scope and Philosophy of Geography and Environmental Studies.....	3 cr.
Approved Geography and Environmental Studies Electives.....	24 cr.
Total	33 cr.

SEQUENCE II: Urban Land Use Planning

This sequence is designed to train city planners and other specialists in land use.

Specific minimum admission requirements for this sequence are: an undergraduate minor in geography or environmental studies; successful completion of G&ES-317 Urban Geography and G&ES-361 City Planning, or equivalent.

Course requirements include a total of 33 credit hours of which at least 18 credit hours must be earned at the 400-level. Field experience is required. After completing all course requirements students work with an approved planning organization in the Chicago area under the supervision of the department program advisor and a planning official designated as off-campus advisor. A research paper is required as a part of the field experience.

Required Courses:

G&ES-322 Aerial Photographic Interpretation or G&ES-376 Cartography I or G&ES-377 Cartography II or G&ES-382 Remote Sensing.....	3 cr.
G&ES-442 Geographic Problems in Quantitative Measurements or other approved statistics course.....	3 cr.
Approved physical planning course.....	3 cr.
PSCI-PA 332 Public Administration or other approved political science course.....	3 cr.
G&ES-450 Seminar in Comprehensive Planning.....	3 cr.
G&ES-445 Seminar in Resource Management and Decision-Making.....	3 cr.
G&ES-443 Seminar in Urban Land Use Planning or G&ES-451 Seminar in Recreation Planning.....	3 cr.
G&ES-461 Independent Study (Field Experience).....	3 cr.
THESIS PLAN: G&ES-431 Thesis Seminar: Geography and Environmental Studies.....	6 cr.
Approved electives.....	3 cr.
Total	33 cr.

RESEARCH-PAPER PLAN:

Research Paper.....	9 cr.
Approved electives.....	9 cr.
Total	33 cr.

COURSE OFFERINGS

G&ES-104 World Geography, 3 cr. Analysis of global patterns, processes, interrelationships; place geography; map reading, interpretation and reporting.

G&ES-105 Geography of Contemporary Issues, 3 cr. Some of the major problems facing American society. Demonstrates how space expresses itself in poverty problems, the minority ghetto, urban life, environmental deterioration, and population growth and pressure.

G&ES-140 Water Resources and Development, 3 cr. Survey of surface and subsurface water resources and their

impact on human, industrial, agricultural, and recreational development.

G&ES-150 Introduction to Environmental Studies, 3 cr. Environmental relations, problems and proposed solutions, such as environmental degradation, law and impact; land-use planning; resource development; population-resource pressures; urbanization; and technological development; from local to global issues.

G&ES-205 Physical Geography: Climate, Vegetation, and Soils, 3 cr. Introductory survey of the earth's physical environment emphasizing earth-sun relationships, the processes functioning in the atmosphere and oceans, and the development and interrelationships of climate, soil, and vegetation. Lecture 2 hours, lab 2 hours.

G&ES-206 Physical Geography: Landforms, 3 cr. Introductory survey of the earth's physical environment examining the earth's land surface, its composition, its relief forms and the processes that determine landforms, and the mapping of this global surface. Lecture 2 hours, lab 2 hours.

G&ES-212 Economic Geography, 3 cr. World-wide production, distribution and consumption of the principal commercial products of farm, range, forest, mine, and sea.

G&ES-213 Cultural Geography, 3 cr. Social-cultural organizations and their relationships with the physical environment. Human spatial behavior, determinants of rural and urban settlement patterns, and urban settlement types.

G&ES-214 Geography of Wine, 2 cr. Production, distribution and consumption of wine.

G&ES-220 Environmental Pollution Control, 3 cr. Introductory course in environmental pollution with emphasis on air, noise, solid waste, sources of pollution, methods of measurement and analysis, as well as legal and economic factors which dictate possible solutions.

G&ES-302 Regional Geography, 3 cr. Exploration and analysis of the physical, cultural, political, and economic make-up of regions and regional settings. Regions covered may include: Africa, Anglo-America, Central America, South America, Asia, Australia and Islands of the Pacific, Europe, China, Japan, India, the Soviet Union, etc. Consult the Schedule of Classes for specific region.

G&ES-304 Women's Place and Space, 3 cr. Representation and realities related to women's space and women's role in spatial change.

G&ES-305 Geography and Map Skills for Teachers, 3 cr. Focuses on five main themes in geography; methods and materials to teach the themes in K-12 classes. Map skills and instructional strategies will also be presented.

G&ES-307 Environmental Education Seminar, 3 cr. Analysis and development of environmental education instructional materials and teaching strategies. Seminar focus varies depending on the interests of the participants.

G&ES-309 Principles and Methods of Environmental Interpretation, 3 cr. Naturalists and environmental educators learn how to interpret the environment to others in park and camp settings; philosophy, organization, administration, and program skills involved in the use of outdoor

interpretive methods, such as field trips, nature trails, campfire programs, overnight camping, and trailside museums, with emphasis on meeting the needs of urban citizens.

Prereq.: consent of instructor.

G&ES-311 Comparative World Cultures, 3 cr. The major culture realms of the world. Physical settings are examined and similarities and differences of cultures within these settings are explained; selected examples of cultural groupings are used to explain the interrelationships between the cultural and natural elements of the environment. *Prereq.: G&ES-213 or consent of the instructor.*

G&ES-314 Political Geography, 3 cr. Differences in territorial control existing in selected places in relation to landforms, population distribution, economic activities; areas of current friction between nations.

G&ES-315 World Agricultural Geography, 3 cr. World distribution of crops and domesticated animals in relation to natural and cultural conditions.

G&ES-316 Location Analysis, 3 cr. Theoretical analysis of the distributional patterns of phenomena on the earth's surface, design of optimal spatial arrangements, location theory, emphasis on economic activities. *Prereq.: G&ES-212 or consent of instructor.*

G&ES-317 Urban Geography, 3 cr. Application of geography to the interpretation of urban settlement using both topical and regional approaches; emphasis on major local cities, field trips.

G&ES-318 Conservation of Natural Resources, 3 cr. Historical approach toward understanding concepts, principles and problems in the management of natural resources: air, water, minerals, soil, forest, grasslands, and wildlife.

G&ES-319 Natural Resources: Policy and Planning, 3 cr. Physical, economic, social and political factors involved in policy determination and planning for natural resource development; emphasis upon relations between public and private enterprise and policies for international resource development. *Prereq.: G&ES-318 or consent of instructor.*

G&ES-320 Geography of Urban Land Use, 3 cr. Land use planning processes focusing on urban areas. Emphasis on the determinants of land use and the techniques required to analyze land use. Field experience in land use mapping will be included. *Prereq.: G&ES-317 or consent of instructor.*

G&ES-322 Aerial Photographic Interpretation in Geography, 3 cr. Development and use of aerial photographs with emphasis on proper techniques for interpretation of geological structures, landscapes, cultural and economic activities. *Prereq.: G&ES-206, G&ES-212, or consent of instructor.*

G&ES-326 Recreation Geography, 3 cr. Recreation location, management, and planning in rural and urban areas. Emphasis on the urban area, its recreational needs, and the needs of urban residents in rural areas. *Prereq.: consent of instructor.*

G&ES-327 Forest Resources Management, 3 cr. Overview of forestry, forest uses, forest problems, and forest management policies and practices in the United States and the world.

G&ES-328 Wildlife Resource Management, 3 cr. General wildlife management course for resource planners, interpretative naturalists, and teachers. Basic understanding of wildlife values, wildlife conservation principles and practices, and current wildlife policy issues with emphasis on wildlife and its management, appropriate for a metropolitan area such as northeastern Illinois. This field-oriented course is a useful preparation for students considering an advanced degree in fish and/or wildlife management.

G&ES-329 Alternate Energy: Policy and Practice, 3 cr. Study of renewable energy resources as alternatives to nuclear energy and the traditional fossil fuels; the current state of the art in using sunlight, wind, water, and biomass for energy; policy options and issues in implementing such alternative technologies.

G&ES-331 The Natural Environment in Spring, 3 cr. Integrative study of seasonal changes of the natural environment in spring; climate, soils, water, plants, animals, and the human relationships associated with seasonal changes. Conducted primarily in the field.

G&ES-332 The Natural Environment in Summer, 3 cr. (See G&ES-331 for course description.)

G&ES-333 The Natural Environment in Autumn, 3 cr. (See G&ES-331 for course description.)

G&ES-334 The Natural Environment in Winter, 3 cr. (See G&ES-331 for course description.)

G&ES-339 Geography of Fossil Energy Resources, 3 cr. Examination of the geographical distribution and locational factors influencing the use of fossil energy resources and the dynamics of their consumption, including an overview of historical patterns, and current and future trends; new technologies and management strategies against the background of finite resource base and projected need for worldwide conservation of fossil fuels. Several sessions to be held in the field.

G&ES-340 Water Resources Planning, 3 cr. Detailed investigation of need for water resources planning and the use of appropriate planning techniques, with emphasis on multipurpose resource management.

G&ES-341 Field Methods in Water Resources, 3 cr. Examination and application of methodologies utilized in water resource exploration and development, with emphasis on seismic and resistivity techniques. Field trips and research project required. *Prereq.: G&ES-340 and ESCI-337 or consent of instructor.*

G&ES-342 Waste Water Treatment, 3 cr. Analysis of waste water treatment systems, including water contaminated by toxic and hazardous substances. Use of treated waste water and sludge. Field trips and projects. *Prereq.: G&ES-340 and CHEM-211 or equivalent.*

G&ES-346 Geography of Metropolitan Chicago, 3 cr. Geographical factors affecting Chicago; detailed study of communities within Chicago and its suburbs in Illinois; field trips.

G&ES-347 Rehabilitation of Historic Urban Areas: Neighborhood Renovation, 3 cr. Basic issues and principles of historic urban neighborhood preservation, revitaliza-

tion, restoration and gentrification emphasizing public and private market initiatives. Field work in the Chicago metropolitan area provides exposure to preparation and methods of surveying, collecting, recording and processing data for the preservation of historic districts.

G&ES-350 Marketing Geography, 3 cr. Spatial patterns of market activities at the wholesale and retail levels, theories of the location of private and public service facilities and methods of store location; planning and market area analysis. *Prereq.: G&ES-212, or ECON-217, or consent of instructor.*

G&ES-351 Statistics for Geographers and Earth Scientists, 3 cr. Introduction to statistical problems, principles, and techniques for the study of geography or earth sciences. *Prereq.: nine credits in geography and environmental studies or earth science.*

G&ES-352 Independent Study in Geography and Environmental Studies, 3 cr. Study of a topic of special interest to the student. *Prereq.: consent of instructor.*

G&ES-353 Independent Study in Geography and Environmental Studies, 2 cr. (See G&ES-352 for description.)

G&ES-354 Independent Study in Geography and Environmental Studies, 1 cr. (See G&ES-352 for description.)

G&ES-355 Metropolitan Transportation: Problems and Planning, 3 cr. Problems of transportation in the metropolitan area, focusing on commuting, expressway development, the automobile vs. public transportation, and congestion in the central business district. Emphasis on the attempts to plan more effective transportation systems, looking particularly at the Chicago area. *Prereq.: G&ES-317 or consent of instructor.*

G&ES-356 Coastal Environments, 3 cr. Analysis of the morphology of coastal environments including the factors that influence their development and distribution including human impact on contemporary coastal environments. *Prereq.: six hours in geography and environmental studies and G&ES-206 or consent of instructor.*

G&ES-357 Urban Land Environment, 3 cr. The urban land environment: water, landforms, and geomorphological processes; their relations to urban development and planning with Chicago as a case study. Local field trips. *Prereq.: G&ES-317, or G&ES-206 or consent of instructor.*

G&ES-358 Urban Atmospheric Environment, 3 cr. Interaction between cities and their atmospheres. Emphasis on micro-climatic and meso-climatic effect of urban environments. Causes, types and implications of inadvertent climate modification in cities. Field work in the Chicago area. *Prereq.: G&ES-205 or consent of instructor.*

G&ES-359 Environmental Planning, 3 cr. Principles of land development with emphasis on physical environmental opportunities and limitations; concepts of land ownership, tenure and use; ecological and environmental analysis; techniques of site design. *Prereq.: G&ES-150 and G&ES-361.*

G&ES-360 Environment and Behavior, 3 cr. Concepts from several social science disciplines important for understanding the relationship between human behavior and the environment. Topics include environmental attitudes and perception, attitude and behavior change, environmental conflict

and conflict resolution, public participation, and behavioral aspects of global resource management problems.

G&ES-361 City Planning, 3 cr. City planning process; historical development of planning in the United States; basic planning studies including the components of a comprehensive plan; planning theory and practice; implementation procedures; social planning. *Prereq.:* G&ES-317 or consent of instructor.

G&ES-362 Population Problems, 3 cr. Growth and distribution of population; elements of population change such as birth, death, and migration; short and long term problems of local and global nature.

G&ES-363 Field Experience, 3 cr. Investigation of a variety of specific geographic and environmental issues such as water resources; recreation; environmental health; environmental law and economics. Classroom and field experiences. Consult the schedule of classes for specific topics. *Prereq.:* twelve hours in geography or environmental studies.

G&ES-364 Field Experience, 4 cr. (See G&ES-363 for course description.)

G&ES-365 Field Experience, 5 cr. (See G&ES-363 for course description.)

G&ES-366 Field Experience, 6 cr. (See G&ES-363 for course description.)

G&ES-368 Changing Global Climates, 3 cr. Using basic meteorological concepts, this course explores the changing patterns and cycles of global climates. Specific attention is given to both natural phenomena, such as El Niño, and human impacts such as deforestation, ozone depletion, and the greenhouse effect.

G&ES-369 Urban Land Use Planning, 3 cr. Major topics in urban land use planning such as zoning and transportation; residential, commercial, manufacturing, or recreational land use. Consult the Schedule of Classes for specific topics. *Prereq.:* G&ES-361 or consent of instructor.

G&ES-370 Regional Economic and Social Development, 3 cr. Variations in the economic and social development and social conditions of United States and world regions; consideration of inequities in regional development and of strategies for change. *Prereq.:* G&ES-212, G&ES-213 or consent of instructor.

G&ES-371 Geomorphology, 3 cr. Sequential landform processes emphasizing the integration of diastrophism, weathering, and the erosional agents of gravity, water, wind, ice, and waves. *Prereq.:* G&ES-206.

G&ES-372 Regional Geomorphology, 3 cr. Selected regional geomorphic landscapes resulting from the integration of geological structure and climatic-geomorphic processes over time. *Prereq.:* G&ES-206.

G&ES-373 Biological Geography, 3 cr. Geographical distribution of living organisms and the principles underlying this distribution. *Prereq.:* six hours of general biology.

G&ES-374 Research Methods in Environmental Perception, 3 cr. Survey and analysis of literature and research related to environmental perception; methods of data collection, interpretation and evaluation for students' original research projects. *Prereq.:* junior standing or consent of instructor.

G&ES-375 Regional Climatology, 4 cr. Controls of climate, the development of regional climatic characteristics and their spatial arrangement, and the development of climatic classifications. Laboratory.

G&ES-376 Cartography I, 3 cr. Principles, elements and philosophy of cartographic presentations, covering historical and modern cartographic techniques, symbolization, projections and the elements of cartography as a science and an art.

G&ES-377 Cartography II, 3 cr. Techniques and methods of cartography including drafting and reproduction of cartographic representations. Lectures and laboratory exercises dealing with cartography as an art. *Prereq.:* G&ES-376 or consent of instructor.

G&ES-378 Physical Climatology, 3 cr. Parameters and processes in the atmospheric system. Energy budgets, evapotranspiration, water balance; climatic geomorphology and climatic change. *Prereq.:* G&ES-205 or consent of instructor.

G&ES-379 Seminar in Physical Geography, 3 cr. Selected areas of current research on problem resolution in physical geography. Consult the schedule of classes for specific topics. *Prereq.:* six credit hours of physical geography or earth science or consent of instructor.

G&ES-380 Field Methods, 3 cr. Introduction to the instruments, measurements, mapping techniques, and sampling procedures used to acquire primary data from field observations. Development of a field research plan, culminating in research projects tailored to each student's interest. *Prereq.:* six hours in geography and environmental studies or consent of instructor.

G&ES-381 Field Camp, 6 cr. Intensive study of a region emphasizing its physical and cultural geography as well as assessment of environmental impact. Daily or extended field trips. Research paper required. Pre-camp briefing sessions.

G&ES-382 Remote Sensing in Geography and Environmental Studies, 3 cr. Basic principles of remote sensing and data collection with analysis of landforms, resource development, pollution detection and land use with major emphasis on planning applications.

G&ES-383 Internship in Geography and Environmental Studies, 3 cr. Supervised field experience with an agency related to the student's career interest. Prior course work and other experience are evaluated before approval is granted to enroll in the internship. A handout to guide the internship is available from the faculty advisor. *Prereq.:* consent of instructor and department chairperson.

G&ES-384 Internship in Geography and Environmental Studies, 4 cr. (See G&ES-383 for course description.)

G&ES-385 Internship in Geography and Environmental Studies, 5 cr. (See G&ES-383 for course description.)

G&ES-386 Internship in Geography and Environmental Studies, 6 cr. (See G&ES-383 for course description.)

G&ES-390 Environmental Digital Image Processing, 3 cr. Digital image processing as it applies to a variety of environmental issues. Students are required to use the computer to map and analyze satellite generated data.

G&ES-401 Seminar in Cultural Geography, 3 cr. Selected theories and methodologies of cultural geography and the current trends within the discipline; students prepare a seminar paper that incorporates the concepts of a specific approach applied to a local phenomenon. *Prereq.:* graduate standing, G&ES-213, or consent of instructor.

G&ES-402 Seminar in Political Geography, 3 cr. Major approaches to political geography; preparation and presentation of a seminar paper incorporating a significant portion of pertinent political geographic theory. *Prereq.:* graduate standing, G&ES-314 or consent of instructor.

G&ES-411 Scope and Philosophy of Geography and Environmental Studies, 3 cr. Historical development of geography as a regional, spatial, and environmental science: its content, subdivisions, and methods of study. *Prereq.:* graduate standing and nine credit hours in geography and environmental studies.

G&ES-421 Seminar in Climatological Problems, 4 cr. Regional, physical, and urban climatology. The study of independent topics is encouraged. *Prereq.:* graduate standing, G&ES-375, G&ES-378, or consent of instructor.

G&ES-431 Thesis Seminar—Geography and Environmental Studies, 6 cr. Students conduct research and write a thesis to fulfill requirements for the Master of Arts degree.

Prereq.: acceptance to master's degree candidacy in geography and environmental studies.

G&ES-442 Geographic Problems in Quantitative Measurements, 3 cr. Statistical applications in geography and environmental studies; reliability of quantitative formulas and studies; geometrics; statistical project required as part of the course. *Prereq.:* graduate standing and an introductory course in statistics or consent of instructor.

G&ES-443 Seminar in Urban Land Use Planning, 3 cr. Urban spatial structure, activity systems and land development processes, examination of survey techniques, analysis procedures and modeling systems of evaluating land use plans. Topics may include housing, zoning, transportation relationships, and environmental issues. Consult the schedule of classes or specific topics. *Prereq.:* graduate standing and six hours of planning courses.

G&ES-444 Seminar in Regional Geography, 3 cr. Physical, cultural and economic make-up of a region; intensive reading and discussion. Consult the schedule of classes for specific topics. Seminar paper required. *Prereq.:* graduate standing.

G&ES-445 Seminar in Resource Management and Decision-Making, 3 cr. Research seminar involving the principles of decision-making as utilized in the field of resource management; application of these principles through research projects conducted in the Chicago metropolitan area. *Prereq.:* graduate standing, G&ES-319, or consent of instructor.

G&ES-446 Seminar in Environmental Studies, 3 cr. Current environmental topics. Students present a research proposal with a detailed resource bibliography. Proposals may serve as the basis for required research papers. Consult the schedule of classes for specific topics. *Prereq.:* graduate standing, nine credits in environmental studies, or consent of instructor.

G&ES-447 Seminar in Open Space Issues, 3 cr. Analysis of current open space issues at local, regional and national levels. Includes problems and factors such as land

use conflicts, accessibility, recreational needs, funding, public and private open space agencies and open space acquisition methods. *Prereq.:* graduate standing and nine credits in environmental studies.

G&ES-448 Seminar in Land Use Issues, 3 cr. Research seminar concerning the problems, issues, and solutions associated with the use and development of land.

Prereq.: graduate standing, nine credits in environmental studies, or consent of instructor.

G&ES-449 Seminar in Land Use Controls, 3 cr. Research seminar concerning the rationale and methods of regulating the use of private land: land subdivision, zoning, growth control. *Prereq.:* graduate standing and six credit hours of planning courses.

G&ES-450 Seminar in Comprehensive Planning, 3 cr. Urban land use planning process emphasizing the analysis and application of policies for urban spatial structure, activity systems, and land development. Review and criticism of official comprehensive plans of cities in the Chicago metropolitan area. *Prereq.:* graduate standing and six credit hours of planning courses.

G&ES-451 Seminar in Recreation Planning, 3 cr. Field work primarily in the Chicago metropolitan area. Examination of problems, hypothesis testing, and data processing on selected topics in urban recreation. *Prereq.:* graduate standing and consent of instructor.

G&ES-452 Field Work in Environmental Studies, 6 cr. Field techniques in environmental science, covering drainage systems, location of sanitary landfills, water pollution sources, distribution of landforms and glacial deposits. *Prereq.:* graduate standing and consent of instructor.

G&ES-461 Independent Study in Geography and Environmental Studies, 3 cr. Independent research on a topic chosen in consultation with the instructor. *Prereq.:* graduate standing and consent of instructor.

G&ES-471 Seminar in Urban Geography, 3 cr. Intensive discussion, study and research on the most essential topics in urban geography; central place theory, urban renewal programs, population and economic development; field work. *Prereq.:* graduate standing.

Oceanography

G&ES-OC-324 Oceanography I, 3 cr. Ocean boundaries and bottom topography. Origin and evolution of ocean basins. Nature and characteristics of coastal and marine sediments. Gathering of oceanological data and development of the marine sciences. *Prereq.:* G&ES-205, ESCI-121, ESCI-211, or consent of instructor.

G&ES-OC-325 Oceanography II, 3 cr. Physical and chemical properties and characteristics of sea water. Hydrodynamics, currents, waves, tides, circulation. Life conditions in the ocean environment, relationship to marine biology. Economic oceanography; the use of statistical methods and marine cartography. *Prereq.:* G&ES-324 or consent of instructor.

G&ES-OC-335 Ocean Resources, 3 cr. Comprehensive study of the current and future exploitation of the ocean resources.

GREEK STUDIES

Nancy A. Spencer, M.A., Assistant Professor of Anthropology
Coordinator

UNDERGRADUATE PROGRAM

Minor in Greek Studies (18 cr. hrs.)

Requirements:

Modern Greek Language	6 cr.
For non-native Greek speakers:	
FL-GREK-101 Modern Greek I	3 cr.
FL-GREK-102 Modern Greek II	3 cr.
For native Greek speakers:	
FL-GREK-103 Modern Greek III	3 cr.
FL-GREK-202 Intermediate Modern Greek	3 cr.
One approved course in modern or Byzantine Greek culture or history	3 cr.
One approved course in ancient Greek history or culture	3 cr.
Electives in Greek Studies	6 cr.
Total	18 cr.

HISTORY

Charles M. Barber, Ph.D., Professor
S. Lorenzo Harrison, Ph.D., Professor
J. Fred MacDonald, Ph.D., Professor
J. Ignacio Mendez, Ph.D., Associate Professor
Joseph C. Morton, Ph.D., Professor
Bernard Powers, Ph.D., Associate Professor, Chairperson
Steven A. Riess, Ph.D., Professor
Zachary Schiffman, Ph.D., Associate Professor
Gregory Holmes Singleton, Ph.D., Professor
P. Craig Smith, Ph.D., Professor
June Sochen, Ph.D., Professor
Salme Harju Steinberg, Ph.D., Professor
Kenneth W. Stetson, Ph.D., Assistant Professor
Sue Sheridan Walker, Ph.D., Professor

The Department of History is committed to providing all students with an historical perspective in its undergraduate and graduate courses so they can better understand the present and can look to the future with a knowledge of the past. The department offers a comprehensive range of courses that explore human history at all times and places. The tools taught by the historian aid all students in their preparation for careers.

The Department of History offers courses leading to the degrees of Bachelor of Arts and Master of Arts. In addition, the Department offers a minor.

NOTE: Many history courses have been renumbered and others consolidated. Students who took a course under one number will not receive credit for taking the same course under its new number.

UNDERGRADUATE PROGRAMS

Major in History for the Bachelor of Arts Degree

Required Courses:

Two courses in European History:	6 cr.
HIST-111 Currents in Western Civilization, 3000 B.C.-1500 A.D.	3 cr.
HIST-112 Currents in Western Civilization, 1500 A.D.-Present	3 cr.
Two courses from the following in United States History:	6 cr.
either HIST-202 History of Afro-Americans to 1877 or HIST-214 United States History, 1607-1877	3 cr.
either HIST-203 History of Afro-Americans Since 1877 or HIST-215 United States History, 1877-Present	3 cr.

Two courses in non-European and non-United
States History:

These courses may be chosen from such areas as Latin America, Asia, Africa, The Black in World History, or thematic courses related to western expansion or interaction with other cultures.

Six courses chosen from 300-level electives in history with the approval of an advisor	18 cr.
Total	36 cr.

NOTE: Only one section of each of the following courses may apply to the major: HIST-390, HIST-391, HIST-392, HIST-393.

Students wishing to be certified for teaching history in secondary schools should consult the Secondary Education section of this catalog. Students seeking certification to teach United States history are required to complete 8 semester hours in U.S. history.

Minor in History (18 cr. hrs.)

Six history courses (18 credit hours) of which a minimum of nine credit hours must be earned at the 300-level, chosen in consultation with a departmental advisor.

GRADUATE PROGRAM

Master of Arts in History

Requirements for Admission to the Program:

Applicants must fulfill the general requirements for admission to the Graduate College and have a minimum of 24 credit hours in undergraduate history, social science and/or human

ities courses which are approved by the Department of History.

Requirements for the Degree:

Students have the choice between two options.

Thesis Option

Required Courses:

HIST-401 Historiography and Historical Method	3 cr.
Two graduate research seminars	6 cr.
Five 300 or 400-level history electives chosen in consultation with the advisor (of which at least two must be at the 400-level)	15 cr.
HIST-499 Thesis Seminar: History	6 cr.
Total	30 cr.

NOTE: Students must pass a final comprehensive exam covering material from the courses and the student's thesis.

Non-Thesis Option

Required Courses:

HIST-401 Historiography and Historical Method	3 cr.
Two graduate research seminars	6 cr.
Seven courses of which at least four are 400-level graduate readings courses or additional seminars and at most three are 300-level courses chosen in consultation with the advisor	21 cr.
Electives in History or another relevant field chosen in consultation with the advisor	6 cr.
Total	36 cr.

NOTE: Students must pass a final comprehensive examination covering the course work.

COURSE OFFERINGS

HIST-101 History of Chicago, 3 cr. General survey of Chicago from the early settlement to the present with emphasis on patterns of growth, immigration, commercial and economic development and cultural contributions.

HIST-102 History of Popular Culture in the 20th Century, 3 cr. General survey of American popular culture in the present century, emphasizing popular tastes in music, film, radio, television, sports and literature.

HIST-104 History of East Asian Culture, 3 cr. General historical introduction to the art, music, literature, philosophy, life styles, and cultural traditions of East Asia.

HIST-105 History of United States Culture, 3 cr. General introduction to United States history and culture. Through a topical approach, students are introduced to historical process, method, and perspective in U.S. cultural history.

HIST-107 Themes in Modern African History, 3 cr. Introduction to contemporary Africa through examination of selected historical topics and issues which have shaped the

socioeconomic and political contours of the sub-Saharan countries.

HIST-109 Introducing Latin America, 3 cr. A topical approach to Latin American history: culture, geography, politics, etc. of Latin America.

HIST-111 Currents in Western Civilization, 3000 B.C.-1500 A.D., 3 cr. Survey of the history of various societies and cultures from the ancient mid-Eastern and Greco-Roman civilizations of Europe up to the Renaissance.

HIST-112 Currents in Western Civilization, 1500 A.D. to the Present, 3 cr. Survey of the economic, social, political and cultural highlights of modern Europe from the Renaissance to the present age of expanded European influence.

HIST-200 Themes in History, 3 cr. Readings and analysis of important historical themes of special interest to undergraduate students. Consult the Schedule of Classes for specific topics.

HIST-202 History of Afro-Americans to 1877, 3 cr. Survey of the history of Black Americans from the African background through the Reconstruction period with emphasis on such themes as slavery, the origin of free Blacks, Black social activism prior to the War Between the States, and the development of Black communities during Reconstruction.

HIST-203 History of Afro-Americans Since 1877, 3 cr. Survey of the history of Black Americans from the end of Reconstruction to the present with emphasis on such themes as the role of Blacks in the political and industrial order of the New South, the goals and concerns of Afro-American leadership, the formation of northern urban communities, and the rise of civil rights activism.

HIST-204 Latin American History to 1825, 3 cr. Early Indian civilizations; age of discovery and conquest; socioeconomic, cultural and governmental institutions in colonial life; wars of independence.

HIST-205 Latin American History Since 1825, 3 cr. Cultural and institutional developments in Latin America since independence.

HIST-206 Introduction to Chicano History, 3 cr. Introductory survey of the Chicano experience from the conquest of the Aztec, the Spanish colonization, the Republic of Mexico and its incorporation into the United States; the historical development of Chicano society in the U.S. during the nineteenth and twentieth centuries.

HIST-214 United States History, 1607-1877, 3 cr. Social, political, intellectual, diplomatic and economic development of the American colonies and the United States from the beginnings through 1877.

HIST-215 United States History, 1877-Present, 3 cr. Social, political, intellectual, diplomatic, and economic development of the United States from 1877 to present.

HIST-216 The Black in World History, 3 cr. History of the Black experience beginning with African origins; interactions with the Oriental, Arab and European worlds; the role of

Blacks in Latin American history; the impact of Blacks on the history of the United States.

HIST-300A Ancient Greece, 3 cr. Social, political, and intellectual history of Greece, from the age of Homer through the Peloponnesian War. Readings include selections from the poetry, drama, history, and philosophy of the period. (Formerly HIST-340W)

HIST-300B Ancient Rome, 3 cr. The history of Rome from prehistoric cultures to the end of the Roman Empire. (Formerly HIST-305)

HIST-301 Medieval Europe, 3 cr. Major themes of the Middle Ages in Europe with emphasis on Western Europe. (Formerly HIST-313) *Prereq.: HIST-111.*

HIST-302A Age of Renaissance, 3 cr. The political and cultural history of Italy and Northern Europe from 1300-1600. (Formerly HIST-340A)

HIST-302B Age of the Reformation, 3 cr. The religious crisis within Roman Catholicism and the genesis and growth of the Protestant movement. (Formerly HIST-366) *Prereq.: HIST-111 or HIST-112.*

HIST-303 Europe During the Ancien Regime — Seventeenth and Eighteenth Centuries, 3 cr. The political, economic, social, and intellectual development of Europe in the seventeenth and eighteenth centuries. (Formerly HIST-306)

HIST-304 Europe in the Age of Revolution, 1789-1871, 3 cr. The historical forces in European society from the French Revolution to the completion of the unification processes. (Formerly HIST-319)

HIST-305 Europe in the Age of Imperialism, 1871-1919, 3 cr. The historical forces in European society during the period of great territorial expansion and rivalry culminating in the First World War. (Formerly HIST-320)

HIST-306 Europe in the Age of Ferment, 1919-Present, 3 cr. European history in the time of recurrent warfare, dislocation, authoritarianism, and reappraisal. (Formerly HIST-321)

HIST-310 History of Spain, 3 cr. Survey of Spanish history from its pre-historic times to the present, with emphasis on social and economic developments; special attention to issues affecting Spain in the last two centuries. (Formerly HIST-345M)

HIST-311A History of England to 1688, 3 cr. Survey of English history to the revolution of 1688; emphasis on significant themes, such as the evolution of monarchy and parliament, medieval society, the Elizabethan world, and constitutional crisis in Stuart England. (Formerly HIST-346)

HIST-311B History of England from 1688 to the Present, 3 cr. The political, economic and cultural forces that shaped Great Britain. Emphasis on the class structure, the transition to an industrial society, Georgian and Victorian culture, contemporary Britain. (Formerly HIST-347)

HIST-312 Tudor England, 3 cr. Major political, social, intellectual and economic trends in sixteenth century England. (Formerly HIST-349)

HIST-313A The History of Prussia-Germany, 1640-1918, 3 cr. Study of the evolution of Prussia in the seventeenth and eighteenth centuries with emphasis upon

her role in the political and social institutions of Germany, Europe and the world through 1918. (Formerly HIST-357)

HIST-313B Twentieth Century Germany, 3 cr. Study of the problems faced by twentieth century Germany, including the demise of the Weimar Republic and the political and social origins of the Nazi Movement, and the situation of post-war Germany. (Formerly HIST-369)

HIST-314A Russian History from the Varangians to 1855, 3 cr. The Russian people, state, and culture from their origins to the death of Nicholas I. (Formerly HIST-358)

HIST-314B Russian and Soviet History, 1855 to the Present, 3 cr. The political, diplomatic, intellectual and social development of the peoples of the Russian Empire and the Soviet Union from the accession of Alexander II to the present. (Formerly HIST-359)

HIST-315 Women in Medieval Society, 3 cr. Survey of the status of women in medieval Europe beginning with the settlement of the barbarians and ending with the high middle ages. (Formerly HIST-379G)

HIST-316 English Legal History, 3 cr. History of the civil (non-criminal) law in medieval and modern England ending with the transformation of the courts, procedure and substantive content of portions of the law in Victorian England. (Formerly HIST-379F)

HIST-317 French Revolution, World Revolutions, 1789-Present, 3 cr. Survey of the great French revolution, 1789-1815, and its impact upon world events to the present time with special attention to definitions of individual rights emerging from the revolution and the fate of 'Liberalism' in the 19th and 20th centuries and the origins of modern nationalism and national liberation struggles from 1789-present. (Formerly HIST-314)

HIST-318 Communism and Socialism, 3 cr. Study of the modern socialist and communist movements from the French Revolution to the present including the early socialist response to industrialization, Marxism, the development of European Socialism, the First and Second Internationals, Revisionism, Leninism, Socialism in World War I, the Russian Revolution, the Third International and interwar Communism, Communism and Resistance in World War II, Titoism, Maoism, Polycenterism, Eurocommunism and Communism today. (Formerly HIST-3453)

HIST-319 George Orwell and 20th Century Tyranny, 3 cr. Imperialism, fascism and communism as they are presented by the author of *Animal Farm* and *1984*. with emphasis on the linkage of language and politics in Orwell's writings; McCarthyism and Watergate with an eye to their relevance to Orwell's warnings. (Formerly HIST-370)

HIST-320 Colonial History of the United States, 1607 to 1775, 3 cr. The nature of colonial government, town life, literature, as well as a comparison of the development of major colonies; key personalities of the period, such as Benjamin Franklin, Cotton Mather, Jonathan Edwards and Thomas Jefferson are studied in detail; designed for American history majors. (Formerly HIST-343) *Prereq.: HIST-214.*

HIST-321 The American Revolution, 1763 to 1789, 3 cr. Intensive study of the events leading to American Inde-

pendence; social and political changes accompanying independence; America under the Articles of Confederation; the writing and adoption of the Constitution. (Formerly HIST-312) *Prereq.: HIST-214.*

HIST-322 The Early National Period, 1789-1824, 3 cr. Study of the formative years of the American Republic from the promulgation of the Constitution in 1789 to the end of the so-called "era of good feeling" in 1824. (Formerly HIST-304) *Prereq.: HIST-214 or equivalent or consent of instructor.*

HIST-323 Jacksonian Era and Sectional Crisis 1824-1860, 3 cr. Various political, economic, social, and intellectual developments involved in the rise of Jacksonian Democracy; the growth of democracy at the state and national levels; the new conception of the presidency, economic growth; nationalism, sectionalism and the socioeconomic factors leading to the breakdown of constitutional government and the beginning of the Civil War. (This course combines the former HIST-301 and HIST-332.) *Prereq.: HIST-214.*

HIST-324 Civil War and Reconstruction 1860-1877, 3 cr. Study of the Civil War and consequent efforts to reconstruct the divided nation; a series of interrelated and consequential socioeconomic, political and intellectual events which profoundly affected the United States and its subsequent history. (This course combines the former HIST-307 and HIST-308.) *Prereq.: HIST-214 or HIST-215.*

HIST-325 Industrial and Progressive America 1877-1929, 3 cr. Study of the formative years of modern America from the conclusion of reconstruction, through the Progressive Era and the administration of Herbert Hoover with emphasis on those ideas, institutions and factors which help explain the growth of present urban and industrial America. (Formerly HIST-373)

HIST-326 The Era of Franklin D. Roosevelt, 1929-1945, 3 cr. In-depth study of the causes and consequences of the Great Depression, the New Deal response to the crisis, and the road to and involvement in World War II, with special emphasis on the leadership of Franklin D. Roosevelt. (Formerly HIST-324) *Prereq.: HIST-215 or equivalent.*

HIST-327 The United States in the Age of Crisis, 1945 to the Present, 3 cr. General survey of the political, diplomatic, economic and social forces which have developed in the U.S. since 1945 with particular emphasis on the crisis in domestic America. *Prereq.: HIST-215 or equivalent recommended.*

HIST-330A United States Social History, 1607-1865, 3 cr. Introduction to the problems of social history, especially social structure, cohesion, conflict and attitudes applied to the development of American sectional societies from the founding of the colonies to the end of the Civil War with special attention to the variety of forms of social organization and the growth of diversity in American culture. (Formerly HIST-309) *Prereq.: HIST-214 recommended.*

HIST-330B United States Social History, 1865-Present, 3 cr. The social dimensions of nationalization and industrialization, with special emphasis on the decline of geographically defined communities, the rise of communities of interest, rationalization of social structures, and the process of alienation. (Formerly HIST-310) *Prereq.: HIST-215 recommended.*

HIST-331A Cultural and Intellectual History of the United States, 1607-1865, 3 cr. Introduction to the major ideological systems in the colonial and national periods: political and religious philosophy, as well as key individual thinkers. (Formerly HIST-341) *Prereq.: two courses in United States History.*

HIST-331B Cultural and Intellectual History of the United States, 1865 to Present, 3 cr. The modern period in intellectual history including social Darwinism, pragmatism, and liberalism. (Formerly HIST-342) *Prereq.: two courses in United States history.*

HIST-332A United States Foreign Relations, 1775-1914, 3 cr. Developments of American foreign policy, diplomacy and other relationships with the rest of the world from the American Revolution through the First World War. (Formerly HIST-381)

HIST-332B United States Foreign Relations, 1914-Present, 3 cr. The United States as a world power, the aftermath of World War I, new relationships with Latin America, Asia and Europe; the United States and the Long Armistice; American involvement in World War II, and the Cold War. (Formerly HIST-382)

HIST-333 American Ethnic History, 3 cr. The role of ethnicity in the development of American history, with special emphasis on the era of industrialization and urbanization including all major ethnic and racial groups, Blacks, American Indians, Hispanics, and western and eastern Europeans with attention to the social and cultural experience of slavery, immigration, alienation, social mobility, acculturation and assimilation, politics, and discrimination. (Formerly HIST-345I) *Prereq.: HIST-214 or HIST-215.*

HIST-334 History of American Sports, 3 cr. The rise of organized sports from its simple pre-modern origins to its present complex state; the evolution of major amateur and professional sports in relation to prevailing historical developments, emphasizing the impact of industrial capitalism and urbanization with attention to the role of ethnic and racial groups, social classes, gambling, gender, politics, international relations, and social mobility. (Formerly HIST-345J) *Prereq.: HIST-214 or HIST-215.*

HIST-335 History of Crime and Violence in America, 3 cr. Survey of the historic patterns of crime and violence, and the evolution of the criminal justice system in the United States from the colonial era to the present day. (Formerly HIST-351)

HIST-336 Chicanos in American Society, 3 cr. In-depth analysis of the Chicano experience in the United States; different theories explaining that experience, e.g. internal colonialism, racism, class segmentation with special attention on the Chicano Movement as it intellectually reflected and influenced the evolving Mexican American community and a brief look at the relationship of Chicanos to other Latino and Latin American peoples. (Formerly HIST-353)

HIST-337 The History of the South, 1877 to Present, 3 cr. Intensive study of the politics of the South after Reconstruction; the emergence of the industrial South; the Black's place in this new situation, and the rise of segregation at the

turn of the century with particular attention to the problem of the Black American and the value system of the South in light of civil rights considerations. (Formerly HIST-344) *Prereq.: one course in United States history.*

HIST-338 Women in American History, 3 cr. Survey, from colonial times to the present, of the role of woman in America including women's reform movements. (Formerly HIST-383) *Prereq.: one course in United States history.*

HIST-339 A History of the United States Jews, 3 cr. Survey of the experience of Jewish immigrants in the United States from colonial times to the present with emphasis on late 19th and 20th century. (Formerly HIST-315) *Prereq.: HIST-215 and HIST-214 recommended.*

HIST-340 History of U.S. Economic Institutions, 3 cr. Historical changes from regional markets to national and multinational markets and responses in business institutions, land policies and agriculture; organizations for trade and commerce and for workers; impact of pacesetting industries. (Formerly HIST-331)

HIST-341 Issues in Twentieth Century Business History, 3 cr. Topics in the history of organizational changes in the workplace and the corporation; the relationship between government and business; the non-profit sector and philanthropy; the business of mass media. (Formerly HIST-330)

HIST-342 The City in American History, 3 cr. General survey of urban America with emphasis on various topics such as the changing function and character of cities, immigration, reform, and urban planning. (Formerly HIST-389)

HIST-343 The United States and Vietnam, 3 cr. Survey of the background, course and current implications of America's longest war: Vietnam, 1950-1975. (Formerly HIST-318)

HIST-344 From Jazz to Rock: Popular Music in American History, 3 cr. The various forms of popular music as expressions of social history, linkages between popular music and the evolution of American civilization in the 20th century with particular attention to the impact of Afro-American culture on such musical forms as ragtime, jazz, swing, and rock and roll and the relationship between rock music and American youth since the mid-1960's. (Formerly HIST-302)

HIST-345 American Culture in the 1960's, 3 cr. The 1960's in terms of the prevailing cultural and countercultural expressions; politicized youth, the Kennedy mystique, and the Vietnam War, inner city rebellions, hippie lifestyles, and popular defiance of governmental authority. Draws from the mass media of the times. (Formerly HIST-303)

HIST-346 Television in American History, 3 cr. The historical role of television in American society with special emphasis on TV and the civil rights movement, TV and the emergence of a youth culture, sex and violence on TV, and TV and the political process. (Formerly HIST-323)

HIST-347A Hollywood as History: American Film, 1930-1945, 3 cr. Commercial feature films from the period of 1930-1945, as a reflection of the cultural evolution of the United States in this time. (Formerly HIST-333)

HIST-347B Cinema and Society: American Film 1945-1960, 3 cr. Commercial motion pictures as a reflection of

American society after World War II, and before the social tumult of the 1960's; a period of readjustment, of Cold War and political uncertainty, of social expansion, and of emerging new social forces. (Formerly HIST-334)

HIST-347C Film and History Since 1970, 3 cr. The evolution of American society since 1970 as communicated in commercial motion pictures; movies as a reflection of and influence on society. (Formerly HIST-335)

HIST-348 Radio in American Society, 3 cr. Social and cultural significance of radio since its emergence in the 1920's; radio broadcasting as a medium of communication and a source of national diversion; with particular attention to the decades before its social/ cultural role was altered by television. (Formerly HIST-384)

HIST-349 Women in Popular Culture, 3 cr. Movies, television, popular novels, and popular music and their treatment of women's roles, images, and performances. Women writers, singers and actresses, will be studied along with male writers and performers' interpretations of women's roles. (Formerly HIST-398A)

HIST-350 History of Brazil, 3 cr. Survey of the history of Brazil; pre-Columbian roots in the Western Hemisphere, Western Europe's influence, and the present with emphasis on political and economic developments in the last two centuries. (Formerly HIST-345B)

HIST-351 Central America and the Caribbean, 3 cr. History of Central America and of the major islands of the Caribbean, emphasizing the period since independence and the relations with the United States. (Formerly HIST-354)

Prereq.: one general course in Latin American history.

HIST-352 History of Puerto Rico, 3 cr. Survey of Puerto Rican history from its pre-Columbian roots to the present, with emphasis on twentieth century developments and attention to contemporary social and economic developments. (This course combines the former HIST-345A and HIST-345E.)

HIST-353 History of Mexico, 3 cr. Early Indian civilization; colonial and national periods with emphasis on race relations, the class structure, the church, latifundia, intellectual life, the revolution, and the impact of industrialization in the twentieth century. (Formerly HIST-355) *Prereq.: one general course in Latin American history.*

HIST-360 History of Pre-Modern China, 3 cr. Introduction to the civilizations of China; philosophy, political history, religion, literature, art, and material culture with emphasis on both the specific data and broad interpretations of Chinese history. (Formerly HIST-326)

HIST-361 Modern Chinese History, 3 cr. Modern Chinese history; institutional and intellectual changes and developments brought about in China by modernization, rebellion, revolution, and war. (Formerly HIST-364)

HIST-362 History of Japan to 1850, 3 cr. The development of Japan from its prehistory until the mid-nineteenth century emphasizing the data of Japanese history and the major paradigmatic approaches to its study. (Formerly part of HIST-380) *Prereq.: HIST-104.*

HIST-363 History of Japan Since 1850, 3 cr. History of Japan from the mid-nineteenth century, including Japan's

opening to the West; the Meiji Restoration, industrialization, constitutional government, imperialism, World War II, the American Occupation, and postwar economic, political, and cultural developments. (Formerly part of HIST-380)

HIST-370 Precolonial Sub-Saharan Africa, 3 cr. Historical survey of Sub-Saharan Africa until the early nineteenth century with emphasis on such topics as state formation and traditional African politics, the historical significance of African culture, the influence of Christianity and Islam, the slave trade, and other consequences of contact with Europe. (Formerly HIST-328)

HIST-371 Nineteenth and Twentieth Century Africa, 3 cr. Critical issues in the history of sub-Saharan Africa during the nineteenth and twentieth centuries such as the historical significance of African culture, the structure and function of traditional political institutions, European imperialism, the administration of colonial rule and consequent socio-economic change, the impact of the world wars, the growth of African nationalist movements and the achievement of independence.

HIST-380 History of Christianity, 3 cr. Analytical survey of the institutional, social and cultural origins of Christianity and the development of that religion from the ancient world to the present with attention to the dynamics of the relationships between Christianity and the various cultures in which it has been housed. (Formerly HIST-367)

HIST-381 History of the Second World War, 3 cr. Intensive study of the Second World War in its global aspects and implications, including post-war developments and the cold war. (Formerly HIST-317)

HIST-382 The World in the Twentieth Century, 3 cr. Contemporary world developments, including the causes and consequences of the two world wars, their impact on the non-European world, the rise of World Communism, the breakup of the colonial empires, etc. (Formerly HIST-325)

HIST-383A Historical Biography: Early America, 3 cr. Important biographies treating major or representative figures in early American history; the personal, psychological and period forces affecting the behavior of key historical figures. (Formerly HIST-393A)

HIST-383B Historical Biography: Modern America, 3 cr. Important biographies treating major or representative figures in modern American history; the personal, psychological and period forces affecting the behavior of key historical figures. (Formerly HIST-393F)

HIST-390 Historical Perspectives, 3 cr. Changing cultural patterns and social structure under the impact of changing technology; concepts and data from anthropology and sociology are used in a historical setting. Consult the Schedule of Classes for specific topics. (Formerly HIST-345) *Prereq.: two courses in history.*

HIST-390A The German-American Experience 1683-1983, 3 cr. Survey of the waves of German immigration to the United States from the first settlers at Germantown, Pennsylvania to the present era with attention to the European events shaping each particular wave of emigrants and the

German communities already established in the New World. (Formerly HIST-390B)

HIST-391 Contemporary Historical Problems, 3 cr. Exploration and analysis of important current political, economic, social, and cultural issues. Consult the Schedule of Classes for specific topics. (Formerly HIST-379)

HIST-392 Problems in History, 3 cr. Exploration and analysis of topics in history; relevant sources and scholarly research. Consult the Schedule of Classes for specific topics. (Formerly HIST-340)

HIST-393 Pro-Seminar in History, 3 cr. Intensive reading and discussion. Students will be assigned weekly readings, prepare papers, and discuss some major aspect of history. (This course combines the former HIST-387, HIST-390, and HIST-391.)

HIST-394 Historical Tour, 6 cr. Study of the history of a given region or country in conjunction with an on-the-spot investigation of historical and cultural sites and landmarks. (Formerly HIST-345Z)

HIST-395A Independent Study in History, 3 cr. Intensive study in selected subject and periods of history. (Formerly HIST-336) *Prereq.: consent of instructor.*

HIST-395B Independent Study in History, 2 cr. (See HIST-395A for description.) (Formerly HIST-337)

HIST-395C Independent Study in History, 1 cr. (See HIST-395A for description.) (Formerly HIST-338)

HIST-395D Independent Study in U.S. History, 1 cr. Intensive study in selected subjects and periods in American history. *Prereq.: consent of instructor.*

HIST-396 Internship I, 3 cr. Situates student interns in workplace positions — museums, research organizations, publishers, advertising agencies, government offices, business corporations, etc. — where historical background, analysis, and methodology may be put to practical use. Helps students to improve research skills as well as explore career possibilities. Class consists of at least 8 hours per week at the workplace, in addition to periodic meetings with faculty and other students. (Formerly HIST-394) *Prereq.: two courses in history and consent of instructor.*

HIST-401 Historiography and Historical Method, 3 cr. Historical understanding; philosophies of history and methods of historical research. (Formerly HIST-451) *Prereq.: graduate standing, 18 hours of undergraduate history classes or consent of instructor.*

HIST-410 Readings in Medieval Women's History, 3 cr. Intensive readings and discussions on aspects of women's life experiences during the medieval period. (Formerly HIST-478C) *Prereq.: same as HIST-401.*

HIST-411 Readings in Early Modern Europe, 3 cr. Intensive readings and discussions of aspects of European history during the early modern period. (Formerly HIST-480B) *Prereq.: same as HIST-401.*

HIST-412 Readings in English History to 1688, 3 cr. Topics in British history until the Glorious Revolution. Consult the Schedule of Classes for specific topics. (Formerly HIST-478B) *Prereq.: same as HIST-401.*

HIST-413 Readings in Tudor History, 3 cr. Topics in British history in the Tudor Period. (Formerly HIST-478D) *Prereq.:* same as HIST-401.

HIST-414 Readings in Modern English History, 3 cr. Intensive readings and discussion on aspects of the history of Modern England. Consult the Schedule of Classes for specific topics. (Formerly HIST-478A) *Prereq.:* same as HIST-401.

HIST-415 Readings in 19th Century Europe, 3 cr. Intensive readings and discussion on aspects of nineteenth century European history. Consult the Schedule of Classes for specific topics. *Prereq.:* same as HIST-401.

HIST-416 Readings in 20th Century Europe, 3 cr. Intensive readings and discussion on aspects of twentieth century European history. Consult the Schedule of Classes for specific topics. *Prereq.:* same as HIST-401.

HIST-417 Readings in History of Weimar and Nazi Germany, 3 cr. Intensive readings and discussion on aspects of Weimar and Nazi Germany. (Formerly HIST-461B) *Prereq.:* same as HIST-401.

HIST-420 Seminar in Early Modern Europe, 3 cr. Research on various topics in the history of early modern Europe. A paper based on primary sources is required. *Prereq.:* graduate standing, HIST-401 and one appropriate 400 level reading course.

HIST-421 Seminar in English History, 3 cr. Research on various topics in English history. A paper based on primary sources is required. (Formerly HIST-472) *Prereq.:* same as HIST-420.

HIST-422 Seminar in 19th Century Europe, 3 cr. Research on various topics in nineteenth century European history. A paper based on primary sources is required. *Prereq.:* same as HIST-420.

HIST-423 Seminar in Modern European Society, 3 cr. Research on various topics in the modern history of Europe. A paper based on primary sources is required. (Formerly HIST-424A) *Prereq.:* same as HIST-420.

HIST-424 Seminar in Impact of War/Revolution in Europe, 3 cr. Research on various topics related to war, revolution and their consequences for European history. A paper based on primary sources is required. (Formerly HIST-481) *Prereq.:* same as HIST-420.

HIST-430 Readings in Colonial America, 3 cr. Intensive readings and discussion on aspects of Colonial American history. (Formerly HIST-463B) *Prereq.:* same as HIST-401.

HIST-431 Readings in American Revolution, 3 cr. Intensive readings and discussion on aspects of the American Revolution. (Formerly HIST-463A) *Prereq.:* same as HIST-401.

HIST-432 Readings in Early National America, 3 cr. Intensive readings and discussion on aspects of the Early National Period. (Formerly HIST-463C) *Prereq.:* same as HIST-401.

HIST-433 Readings in 19th Century America, 3 cr. Intensive readings and discussion on aspects of nineteenth century American history. *Prereq.:* same as HIST-401.

HIST-434 Readings in 20th Century America, 3 cr. Intensive readings and discussion on aspects of twentieth century America. Consult the Schedule of Classes for specific topics. *Prereq.:* same as HIST-401.

HIST-435 Readings in Cultural and Intellectual U.S. History, 3 cr. Intensive readings and discussion on aspects of American cultural and intellectual history. Consult the Schedule of Classes for specific topics. (Formerly HIST-480N) *Prereq.:* same as HIST-401.

HIST-436 Readings in Women's History of the United States, 3 cr. Intensive readings and discussions on American Women's history. Consult the Schedule of Classes for specific topics. *Prereq.:* same as HIST-401.

HIST-437 Readings in Afro-American History, 3 cr. Intensive readings and discussion on aspects of Afro-American history. Consult the Schedule of Classes for specific topics. (Formerly HIST-480A) *Prereq.:* same as HIST-401.

HIST-438 Readings in American Diplomatic History, 3 cr. Intensive readings and discussion on aspects of American diplomatic history. (Formerly HIST-465A) *Prereq.:* same as HIST-401.

HIST-439 Readings in American Social History, 3 cr. Intensive readings and discussion on aspects of American social history. Consult the Schedule of Classes for specific topics. *Prereq.:* same as HIST-401.

HIST-440 Seminar in Colonial America, 3 cr. Research on various topics in Colonial American history. A paper based on primary sources is required. *Prereq.:* same as HIST-420.

HIST-441 Seminar in American Revolution, 3 cr. Research on various topics in the American Revolution. A paper based on primary sources is required. (Formerly HIST-477A) *Prereq.:* same as HIST-420.

HIST-442 Seminar in Early National America, 3 cr. Research on various topics in the Early National Period. A paper based on primary sources is required. (Formerly HIST-477B) *Prereq.:* same as HIST-420.

HIST-443 Seminar in 19th Century America, 3 cr. Research on various topics in nineteenth century America. A paper based on primary sources is required. *Prereq.:* same as HIST-420.

HIST-444 Seminar in 20th Century America, 3 cr. Research on various topics in twentieth century America. A paper based on primary sources is required. *Prereq.:* same as HIST-420.

HIST-445 Seminar in Cultural and Intellectual U.S. History, 3 cr. Research on various topics in American cultural and intellectual history. A paper based on primary sources is required. (Formerly HIST-474A) *Prereq.:* same as HIST-420.

HIST-446 Seminar in Women's History of the United States, 3 cr. Research on various topics in the history of American women. A paper based on primary sources is required. (Formerly HIST-473A) *Prereq.:* same as HIST-420.

HIST-447 Seminar in Afro-American History, 3 cr. Research on various topics in Afro-American history. A paper based on primary sources is required. (Formerly HIST-422) *Prereq.:* same as HIST-420.

HIST-448 Seminar in American Diplomatic History, 3 cr. Research on various topics in the history of American Diplomatic history. A paper based on primary sources is required. (Formerly HIST-476) *Prereq.:* same as HIST-420.

HIST-449 Seminar in American Social History, 3 cr. Research on various topics in American social history. A paper based on primary sources is required. *Prereq.:* same as HIST-420.

HIST-450 Readings in Church and State in Latin American History, 3 cr. Intensive readings and discussion on aspects of church/ state relations in Latin America. (Formerly HIST-467A) *Prereq.:* same as HIST-401.

HIST-451 Readings in Military Government in Latin America, 3 cr. Intensive readings and discussion on aspects of military rule in Latin America. (Formerly HIST-467A) *Prereq.:* same as HIST-401.

HIST-452 Seminar in Latin American Reform and Revolt, 3 cr. Research on various topics in the history of Latin American reform movements and revolts. A paper based on primary sources is required. (Formerly HIST-471A) *Prereq.:* same as HIST-420.

HIST-453 Seminar in History of Mexico, 3 cr. Research on various topics in the history of Mexico. A paper based on primary sources is required. (Formerly HIST-471B) *Prereq.:* same as HIST-420.

HIST-460 Readings in Meiji Restoration, 3 cr. Intensive readings and discussion on various aspects of the Japanese Meiji Restoration. (Formerly HIST-469C) *Prereq.:* same as HIST-401.

HIST-461 Readings in History of Women in Japan, 3 cr. Intensive readings and discussion on various aspects of Japanese women's history. (Formerly HIST-469D) *Prereq.:* same as HIST-401.

HIST-463 Readings in History of Chinese Communism, 3 cr. Intensive readings and discussion on various aspects of Chinese communism. (Formerly HIST-469E) *Prereq.:* same as HIST-401.

HIST-490 Independent Graduate Study in History, 3 cr. Intensive and guided study in selected subjects and periods of history. (Formerly HIST-484) *Prereq.:* graduate standing and consent of instructor.

HIST-499 Thesis Seminar - History, 6 cr. Guidance of students conducting research and writing a thesis to fulfill requirements for the Master of Arts degree in History. (Formerly HIST-431) *Prereq.:* acceptance to master's degree candidacy in history.

LINGUISTICS

Gary Bevington, Ph.D., Professor
Theodora H. Bofman, Ph.D., Associate Professor
Rory Donnelly, Ph.D., Associate Professor
Mary Ann Geissal, M.A., Assistant Professor
John F. Haskell, E.D., Professor, Chairperson
Judith Kaplan-Weinger, Ph.D., Associate Professor
Myrna Knepler, Ph.D., Professor
J. Peter Maher, Ph.D., Professor
Audrey Reynolds, Ph.D., Professor
Jack Richardson, M.A., Assistant Professor
Don M. Seigel, M.A., Associate Professor

The Department of Linguistics offers courses leading to the degrees of Bachelor of Arts and Master of Arts.

UNDERGRADUATE PROGRAMS

Undergraduate programs in Linguistics introduce students to the nature of language, the principles and methods of linguistic study, the phonological and syntactical structure of language in general, as well as the structure of English and, to a lesser extent, other languages. The liberal arts major in Linguistics is designed to provide the student with the tools for looking at language as an object of interest in itself and in relation to the society and culture of which it is a part.

The department of Linguistics offers courses leading to the degree of Bachelor of Arts in Linguistics. There is a minor in linguistics for prospective elementary school language arts teachers (See the Elementary Education section for information) and required courses for students majoring in Secondary-level English education and Bilingual-Bicultural Education.

Major in Linguistics for the Bachelor of Arts Degree

Required Courses:

LING-207	Lexicology: The Study of Words	3 cr.
LING-208	Grammars of English	3 cr.
LING-211	Introduction to Phonology	3 cr.
LING-313	Advanced Syntax	3 cr.

One of the following:.....	3 cr.
LING-201 Language and Culture	3 cr.
LING-303 Language and Society	3 cr.

One of the following:.....	3 cr.
LING-203 Development of American English	3 cr.
LING-205 Language and Human Behavior	3 cr.

One of the following:.....	3 cr.
LING-312 The History of the English Language.....	3 cr.
LING-325 The Child's Acquisition of Language.....	3 cr.

Electives: Choose four courses from the following:.....12 cr.
(courses must be selected in consultation with the Linguistics advisor.)

- Any of the options **not** chosen above (201 or 303; 203 or 205; 312 or 325.)
- Any of the following courses:

LING-101	Introduction to General Linguistics
LING-206	Language and Literature
LING-301	Semantic Analysis
LING-304	Teaching English as a Second language
LING-305	Introduction to Psycholinguistics
LING-306	Linguistics and Reading
LING-327	Seminar
LING-344	Historical Linguistics
LING-350	Advanced Study in Linguistics

Total 33 cr.

It is strongly recommended that the student majoring in Linguistics have an 18 hour minor in a foreign language.

Minor in Linguistics for the Bachelor of Arts Degree in Elementary Education

Required Courses:

LING-208	Grammars of English	3 cr.
LING-211	Introduction to Phonology	3 cr.
LING-312	History of the English Language	3 cr.
LING-325	Child's Acquisition of Language	3 cr.

Select one of the following:3 cr.
LING-101 Introduction to General Linguistics3 cr.
LING-201 Language and Culture3 cr.
LING-203 Development of American English3 cr.
LING-205 Language and Human Behavior3 cr.

LING-205	Language	3 cr.
Select one of the following:		
LING-302	Linguistics for Language Teachers	3 cr.
LING-304	Methods of Teaching ELS	3 cr.
LING-305	Introduction to Psycholinguistics	3 cr.
LING-306	Linguistics and Reading	3 cr.
LING-327	Seminar in Linguistics: Varies	3 cr.

Six credit hours from each of two of the following areas chosen in consultation with a Linguistics departmental advisor: 12 cr.

English	
Foreign Language	
Speech and Performing Arts	
Total	30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

Minor in Linguistics

(18 cr. hrs.)

The courses must be chosen in consultation with a departmental advisor.

GRADUATE PROGRAM

Master of Arts in Linguistics

The graduate program offers work leading to a master of arts degree in Linguistics. This degree may be taken with a concentration in teaching English as a second language.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Program Prerequisites:

For students whose native language is English: 9 hours of undergraduate work in one foreign language or equivalent (as interpreted by the graduate advisors.)

For students whose native language is not English: English

proficiency demonstrated by holding an undergraduate degree from an institution where English is the medium of instruction and/or a score of 600 on the TOEFL. For those selecting the concentration in TESL, a score of 230 on the Test of Spoken English (TSE) is also required.

Requirements for the Degree:

Non-thesis option: 36 hours of 400-level course work in linguistics plus a comprehensive examination, based on a reading list, study questions, etc., and taken after at least 30 hours of course work have been completed.

Thesis option: 30 hours of 400-level course work in linguistics plus a master's thesis for an additional 6 hours credit plus the departmental comprehensive exam. The Thesis option may only be exercised with department approval.

Any special program design, tutorial or independent study must be approved in advance by the graduate advisor.

Course Requirements:

A sequence of required courses for the degree, a sequence of required courses for those wishing the TESL concentration, and the balance of the program in 400-level linguistics electives selected with the approval of the graduate advisor. No more than four courses taken with any one professor may be counted towards the degree.

Required for the degree:

LING-419 Fundamentals of Modern Linguistics
(to be waived for students with a strong undergraduate background in linguistics and replaced with an additional 400-level elective)

LING-415 Phonetics and Phonology
LING-483 Structure of Modern English
One 400-level seminar in Linguistics

Required for the TESL concentration:

LING-480 Techniques of Teaching English as a Second Language
LING-481 Theories of Teaching English as a Second Language
LING-446 Sociolinguistics
LING-482 Second Language Acquisition
LING-484 Seminar in Teaching English as a Second Language

COURSE OFFERINGS

LING-101 Introduction to General Linguistics, 3 cr. Nature and structure of languages and modern American English in particular; an introductory course in linguistics.

LING-201 Language and Culture, 3 cr. Anthropological, psychological and linguistic study of various aspects of the interconnections of language and culture.

LING-203 The Development of American English, 3 cr. Historical and structural approach to American English with attention to regional dialects and dialect geography.

LING-205 Language and Human Behavior, 3 cr. Introduction to basic principles of psycho- and sociolinguistics. Subjects covered include dialect variation, language and the brain, child language acquisition, language and gender, conversational analysis, non-verbal behavior, pidgins and creoles, and sign language. The course is designed for students having no background in linguistics.

LING-206 Language and Literature, 3 cr. Works of literature studied as they present various modes of language with attention to forms, techniques and styles, through application of linguistic principles and methods.

LING-207 Lexicology: The Study of Words, 3 cr. Introduction to the study of words, with particular attention to English, from an historical perspective, a structural perspective, and a sociolinguistic perspective.

LING-208 Grammars of English, 3 cr. Pedagogical grammars of English considered descriptively, historically and specifically, in terms of their application in the Secondary Schools. *Prereq.: LING-101 or consent of instructor.*

LING-211 Introduction to Phonology, 3 cr. Introduction to theories of sound patterning in language. Articulatory phonetics, phonemics, morpheme structure, phonological feature systems, and topics from generative phonology.

LING-301 Semantic Analysis, 3 cr. Introductory study of some of the problems of meaning in natural language. A variety of semantic analyses will be discussed. *Prereq.: three hours of linguistics or consent of instructor.*

LING-302 Linguistics for Language Teachers, 3 cr. Introduction to applied linguistics. Basic concepts of linguistics as they apply to the fields of language teaching and learning: English, language arts, foreign language, English as a second language. Not applicable to undergraduate or graduate degree program in Linguistics. *Prereq.: graduate standing or consent of advisor. For Graduate Education Majors, also LING-419.*

LING-303 Language and Society, 3 cr. An introduction to the relationship between language and its function in society; the social contexts of communication; class dialects, Black English and other ethnic varieties, language and gender, creole language systems, and the study of social dialects within an urban setting including factors affecting language acquisition and the linguistic behavior of groups of different cultural backgrounds.

LING-304 Teaching English as a Second Language, 3 cr. Linguistic principles and techniques related to the teaching of English as a second language and teaching a second dialect of English; meant for those students who are not yet teaching in the field.

LING-305 Introduction to Psycholinguistics, 3 cr. Processes underlying the production and comprehension of language, utilizing the approach of both psychology and linguistics. Topics include: psychological studies of grammar, memory, and the effect of language on cognition and cognition on language. *Prereq.: LING-211 and LING-213.*

LING-306 Linguistics and Reading, 3 cr. Relationship between language structure and the reading process, with emphasis on the practical problems such as the variety of dialectally different sound-symbol correspondences in Eng-

lish, the perception of speech sounds, the reader's interpretation of syntactic and semantic structures, various alphabetic systems for teaching beginning reading, and an analysis of linguistics texts for teaching reading. Designed to be useful to the in-service classroom teacher as well as to undergraduates.

LING-312 History of the English Language, 3 cr. Historical-descriptive linguistic survey of English from its origins to modern English.

LING-313 Advanced Syntax, 3 cr. Advanced work in current methods of morpho-syntactic analysis, with particular emphasis on the transformational-generative approach. *Prereq.: LING-208.*

LING-325 The Child's Acquisition of Language, 3 cr. Survey of the child's development of phonological, morphological, lexical, semantic, syntactic and pragmatic systems. Consideration of the various theories which attempt to account for a child's ability to acquire language.

LING-327 Seminar in Linguistics, 3 cr. Advanced study of selected topics in theoretical linguistics. Each student will do a research project and present the result of his/her work to the seminar for evaluation. *Prereq.: six credit hours of linguistics.*

LING-344 Historical Linguistics, 3 cr. Place of historical and comparative studies in the broader field of linguistics; principles of linguistic history and of linguistic comparison, concerning phonology, morphology, syntax and lexicon. *Prereq.: LING-211.*

LING-411 Transformational Analysis, 3 cr. History, theory and practice of transformational-generative grammar. *Prereq.: graduate standing and LING-419.*

LING-412 American English—History and Growth, 3 cr. Phonology, morphology, syntax, lexicon of English in the United States as well as its cultural history with reference to the mother country and the New World, both in colonial and post-revolutionary times. *Prereq.: graduate standing, LING-415 and LING-419.*

LING-415 Phonetics and Phonology, 3 cr. Intensive analysis of the sounds of speech, giving special attention to the organs involved in the articulation of speech sounds, auditory discrimination, phonetic and phonemic transcription, different transcription systems and the development of grammatical theory regarding descriptive phonology. *Prereq.: graduate standing and LING-419.*

LING-416 The English Language—History and Development, 3 cr. Survey of English phonology, morphology, syntax, lexicon and cultural history through Old English, Middle English, early Modern English and recent Modern English, using literary documents for the older periods, and literary as well as spoken records for the most recent times.

Prereq.: graduate standing, six credit hours of linguistics, English, or a foreign language, or consent of instructor.

LING-419 Fundamentals of Modern Linguistics, 3 cr. Descriptive linguistic study of language; phonemics and phonemic transcriptions; morphemics; word classes; syntactic structures and sentence patterns, dialects, intonations. *Prereq.: graduate standing.*

LING-421 Seminar in Linguistic Theory, 3 cr. Advanced work and individual projects in a selected area of

linguistic theory. Topics may include Readings in Linguistics, Semantics, Syntax, Language Description, and Word Formation. Consult the Schedule of Classes for specific topics.

Prereq.: graduate standing, four courses including LING-419, and a B average.

LING-424 Structure of Language, 3 cr. Phonological and grammatical structure of a selected language and its genetic relations to others of its family. Topics may include Turkish, Latin, Lakhota, Macedonian, Thai, and Albanian. Consult the Schedule of Classes for specific languages.

Prereq.: graduate standing and LING-419.

LING-428 Stylistics, 3 cr. Selected items in poetry, prose or drama, using recent linguistic contributions as a major tool in the study of such matters as metrics, syntax, lexicon, intonations. **Prereq.:** graduate standing and LING-419.

LING-429 Psycholinguistics, 3 cr. Theoretical studies in the area of linguistics and psychology; possible implications of the form of grammar for the language learning process; survey of relevant research. **Prereq.:** graduate standing and LING-419.

LING-432 First Language Acquisition, 3 cr. Examination of the stages through which a child passes as he/she masters the phonological, morphological, syntactic, and semantic systems of his/her native language, consideration of the various explanatory theories which attempt to account for the child's ability to acquire language. **Prereq.:** graduate standing and LING-419.

LING-440 Linguistics and Literacy, 3 cr. Differences between spoken and written languages; the functions of writing in a literate society; writing systems with particular reference to English orthography; current psycholinguistic research on the acquisition of written language skills; pedagogical implications of linguistic views on literacy. **Prereq.:** graduate standing, LING-415 and LING-419.

LING-444 Lexicography, 3 cr. Review of the problems and trends of word study in the past, especially the notions surrounding the concepts of authority and usage of language; scrutiny of the various types and sources of English vocabulary; recent linguistic insights considered in the light of their value for various kinds of handbooks. **Prereq.:** graduate standing.

LING-445 Comparative Indo-European Linguistics, 3 cr. Survey of the methods of comparative reconstruction as exemplified in the Indo-European family of languages.

Prereq.: graduate standing and LING-419.

LING-446 Sociolinguistics, 3 cr. Measuring and establishing the correlates between linguistic behavior and social level with special attention to the study of social dialects within an urban setting including social factors affecting language acquisition, and linguistic behavior of groups of different cultural backgrounds. Topics may include language planning and language policy, language attitudes, language and gender, conversational analysis, regional and social dialectology. **Prereq.:** graduate standing and LING-419.

LING-448 Seminar in Applied Linguistics, 3 cr. Advanced work and individual projects in a selected area of historical linguistics. Topics may include stylistics, metrical studies, linguistic analysis and language learning, TESL,

psycholinguistic theory and language learning, linguistics and writing, reading, research design, pidgins and creoles, and discourse analysis. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing, four courses including LING-419, and a B average.

LING-451 Seminar in Historical Linguistics, 3 cr. Advanced work and individual projects in a selected area of historical linguistics. Topics may include etymology, cultural contexts, historical reconstruction, and the Balkan Linguistic Union. Consult the Schedule of Classes for specific topics.

Prereq.: graduate standing, four courses including LING-419, and a B average.

LING-453 Seminar in Linguistics and Related Fields, 3 cr. Advanced work and individual projects in a selected area of linguistic specialization, such as psycholinguistics, sociolinguistics, and mathematical languages. Topics may include sociolinguistics, psycholinguistics and creole languages. Consult the Schedule of Classes for specific topics.

Prereq.: graduate standing, four courses including LING-419, and a B average.

LING-470 Thesis Seminar: Linguistics, 6 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts degree in Linguistics.

Prereq.: candidacy for the Master of Arts in Linguistics.

LING-471 Semantic Theory, 3 cr. Survey of the types of meaning in natural languages with special reference to English and of the means that have been employed to study them, especially in English; with special attention on the interrelationship between structural and semantic meaning, and implicit and repressed meaning; obligatory semantic notions in grammatical categories. **Prereq.:** graduate standing and LING-419.

LING-480 Techniques of Teaching English As a Second Language, 3 cr. Survey of techniques specifically relevant to the teaching of English as a second language. Questions relating to the design and sequencing of ESL courses, to procedures for evaluation of ESL students, and to criteria for choosing, adapting and creating teaching materials. **Prereq.:** graduate standing.

LING-481 Theories of Teaching English As a Second Language, 3 cr. Survey of theories of the teaching and learning of English as a second or foreign language. A look at the historical growth and development of second language methodologies from grammar-translation and the direct method, through the audio-lingual method and its offspring, and up to the current natural and eclectic period.

Prereq.: graduate standing.

LING-482 Second Language Acquisition, 3 cr. Survey of recent theories and research on second language acquisition and bilingualism especially in relation to the process of second language learning and teaching in school; rationales of various language teaching methodologies and techniques as well as the concepts of transfer and interference, contrastive analysis, and error analysis. **Prereq.:** graduate standing, LING-419, and LING-481.

LING-483 Structure of Modern English, 3 cr. Description and analysis of the major grammatical structures of spoken and written English in light of traditional, descriptivist, and transformational theories. **Prereq.:** graduate standing and LING-419.

LING-484 Seminar in Teaching English as a Second Language, 3 cr. Survey of current research in English as a second language with particular emphasis on methodology and evaluation. After extensive readings in the current literature, students will be expected to carry out a project of their own. Topics may include materials preparation, current trends, SLA research, language and culture, applied linguistics, English structure, bilingual education, vocabulary, and special education. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing, four courses including LING-419, LING-480, LING-481, and a B average.

LING-485 Experiential Preparation for Teaching English as a Second Language, 3 cr. Emphasis on the preparation of materials and the development of teaching strategies for specific ESL classroom uses. Students examine and evaluate commercially prepared and teacher made materials and lesson plans and devise a limited set of materials of their own. Students will either demonstrate these materials or observe their use in an actual classroom or tutoring situation. **Prereq.:** graduate standing, four courses including LING-419, and a B average.

LING-486 Assessment of the Limited English Proficient Student, 3 cr. Testing and assessment as they relate to limited English proficient students; information on instruments and procedures for testing language and cognitive development; proficiency, placement and achievement testing. Students look at well-known standardized testing devices such as the bilingual syntax measure and the TOEFL test; at cultural and instrumental bias in testing; and at procedures for writing and evaluating classroom tests and various test item types. **Prereq.:** graduate standing, LING-480 and LING-481.

MATHEMATICS

Abdus S. Ansari, Ph.D., Associate Professor

Barry Dayton, Ph.D., Professor

Lidia Z. Filus, Advanced Degree, Associate Professor

David S. Greenstein, Ph.D., Professor

Geraldine Hemmer, M.S., Assistant Professor

Anna-Lise Jensen, Ph.D., Associate Professor

Joo Koo, Ph.D., Professor, Chairperson

Norman Mittman, M.S., Associate Professor

Anthony A. Patricelli, M.S., Associate Professor

Richard W. Reichhardt, Ph.D., Professor

Rakesh K. Rustagi, Ph.D., Associate Professor

David H. Rutschman, Ph.D., Assistant Professor

Louis M. Weiner, Ph.D., Professor

The Department of Mathematics offers courses leading to the degrees of Bachelor of Arts, Master of Arts, and Master of Science.

An undergraduate major in mathematics provides preparation for graduate study and for certain mathematics-related careers. Students may also combine a study of mathematics with teacher education.

UNDERGRADUATE PROGRAMS

The Department of Mathematics offers specializations in the areas of statistics, actuarial mathematics, operations research, scientific computing, and secondary teaching. The statistics option in either business and economics or engineering science requires a minor in a social science which uses statistics. The operations research option in business and economics requires a minor in economics and the operations research option in engineering science requires a minor in physics. The scientific computing option requires a minor in information science. For complete details contact the Department of Mathematics (S-214D) for a copy of the Math Major Handbook.

Major in Mathematics for the Bachelor of Arts Degree

Required Courses:

MATH-107	Calculus I.....	4 cr.
MATH-140	Computing for Mathematicians	3 cr.
MATH-202	Calculus II.....	4 cr.
MATH-203	Calculus III.....	4 cr.
MATH-243	Linear Algebra I.....	3 cr.
MATH-305	Probability Theory I.....	3 cr.

Select one:	3 cr.
MATH-301 Differential Equations I	3 cr.
MATH-338 Advanced Calculus: Single Variable	3 cr.

Electives in mathematics chosen in consultation with the appropriate departmental advisor.....	18 cr.
Total	42 cr.

Students wishing to be certified to teach mathematics in secondary schools should consult the Secondary Education section of this catalog.

Minor in Mathematics for the Bachelor of Arts Degree in Elementary Education

Required Courses:

MATH-107	Calculus I.....	4 cr.
MATH-140	Computing for Mathematicians	3 cr.
MATH-202	Calculus II.....	4 cr.
MATH-243	Linear Algebra I.....	3 cr.
MATH-251	Discrete Mathematics	3 cr.
MATH-273	Statistics with Applications	4 cr.
MATH-312	Foundations of Geometry.....	3 cr.
MATH-331	Foundations of Algebra I.....	3 cr.

Select one of the following:	3 cr.
MATH-321 History of Mathematics	3 cr.
MATH-322 Number Theory	3 cr.

Total 30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

Minor in Mathematics**(21 cr. hrs.)****Required Courses:**

MATH-107	Calculus I.....	4 cr.
MATH-202	Calculus II.....	4 cr.
MATH-203	Calculus III.....	4 cr.
MATH-243	Linear Algebra I.....	3 cr.
Electives: 6 hours of approved 300-level mathematics courses.....		6 cr.
Total		21 cr.

GRADUATE PROGRAMS**Master of Science in Mathematics**

The M.S. in Mathematics is designed for students with a strong undergraduate background in mathematics wishing to better prepare themselves for careers in applied mathematics or in the teaching of mathematics. Students can concentrate on an area of applied mathematics or on secondary education mathematics. For the latter concentration students may earn up to 12 hours of course work in education, and apply them towards secondary teaching certification. Courses are scheduled to accommodate the evening student.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Students must have 6 undergraduate courses in mathematics after calculus, four of which must be equivalent to courses in the "Basic Competency" list below. A student with 4 or 5 courses after calculus may be admitted conditionally at the discretion of the advisor. Students who are less well prepared must complete additional course work before applying to the program.

Basic Competency Courses:

MATH-301	Differential Equations I
MATH-304	Numerical Analysis
MATH-305	Probability Theory and Applications I
MATH-306	Operations Research
MATH-312	Foundations of Geometry
MATH-322	Number Theory
MATH-331	Foundations of Algebra I
MATH-332	Foundations of Algebra II
MATH-334	Mathematical Statistics I
MATH-336	Mathematical Statistics II
MATH-337	Theory of Equations
MATH-338	Advanced Calculus: Single Variable
MATH-343	Linear Algebra II
MATH-365	Statistical Packages

(MATH-312, 322, 331, 332, 337 are appropriate only for those students who wish to concentrate on secondary education mathematics.)

Requirements for the Degree:

The program consists of ten courses (30 credit hours).

Students must take three courses from the "Basic Competency" list (in addition to those required for admission to the program), and must complete MATH-430, Discrete Mathematical Structures. They select electives appropriate to their area of concentration in consultation with their advisor.

The department recommends concentrations in statistics, operations research, or secondary mathematics teaching. Both the statistics and the operations research concentrations can provide sound preparation for actuarial mathematics and for two-year college teaching. Students concentrating on secondary education mathematics may choose up to four mathematics education courses as part of their degree requirement. Further details are available from the Department of Mathematics.

Depending upon the concentration chosen, students will prepare a thesis or a written project for credit. A formal presentation of the paper and a comprehensive examination on the subject area are also required.

The student's complete program must be approved by the academic advisor.

Master of Arts in Mathematics for Elementary Teachers

This program is designed to provide in-service elementary teachers with an understanding of the mathematical concepts which underlie the topics taught at the elementary level.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

The applicant must have a Chicago or Illinois State Teacher's Certificate and no more than 15 hours of undergraduate mathematics. Elective courses will be chosen in consultation with the graduate advisor.

Requirements for the Degree:**Core Courses:**

MATH-356	Mathematics Structure I.....	3 cr.
MATH-357	Elementary Functions.....	3 cr.
MATH-435	Mathematics Structure II.....	3 cr.
MATH-438	Probability and Statistics for Teachers.....	3 cr.
MATH-439	Computers in Education.....	3 cr.
Electives:.....		15 cr.
Select 5 courses from the following:		
MATH-401	Number Theory for the Elementary School Teacher.....	3 cr.
MATH-402	Modern Algebra for the Elementary School Teacher.....	3 cr.
MATH-403	Modern Geometry for the Elementary School Teacher.....	3 cr.
MATH-410	Modern Analysis for the Elementary School Teacher.....	3 cr.
MATH-457	Recent Trends in Mathematics.....	3 cr.

Courses offered through the College of Education with the approval of the graduate advisor.....	3-9 cr.
Total	30 cr.

A final comprehensive examination in Mathematics is required.

COURSE OFFERINGS**SPECIAL NOTES:**

All Students: A grade of C or better is required in all math courses used as a prerequisite for other math courses.

Majors/Minors: A grade of C or better is required in all math courses.

MATH-DEV-090 Introduction to Algebra, 3 cr. (Can not be applied towards graduation requirements.) Primarily covers arithmetic skills, including whole numbers, fractions, decimals, and percents. Applications are stressed throughout the course. Also includes basic geometry and an introduction to algebra and algebraic notation. **Prereq.:** placement test.

MATH-DEV-091 Basic Algebra, 3 cr. (Can not be applied towards graduation requirements.) Beginning algebra course, including signed numbers, algebraic expressions, laws of exponents, order of operations, linear equations and inequalities, word problems, formulas, polynomials, factoring, radicals, and systems of two linear equations. This course is equivalent to the first year of high school algebra. **Prereq.:** MATH-DEV-090 or placement test.

MATH-102 Intermediate Algebra, 4 cr. Topics include word problems, linear equations and inequalities, formulas, systems of linear equations, polynomials, factoring, algebraic fractions, radicals, quadratic equations, and an introduction to logarithms. This course is equivalent to the second year of high school algebra. **Prereq.:** MATH-DEV-091 or placement test.

MATH-103 Mathematics for Elementary Teachers I, 3 cr. Study of mathematical concepts appropriate for grades K through 3. Sets, numbers, geometry. Only for students majoring in early childhood education or elementary education.

MATH-104 College Algebra, 3 cr. (For students who have completed geometry and at least three semesters of algebra in high school.) Basic algebra review; linear and quadratic equations, sequences and series, complex numbers, theories of equations, logarithmic functions, and elementary probability. **Prereq.:** MATH-102 or placement test.

MATH-105 Trigonometry, 3 cr. The trigonometric functions; solutions of triangles; identities and equations; complex numbers and DeMoivre's theorem. Equations of the straight line; the conic sections; transformation of coordinates; polar coordinates; solid analytic geometry. **Prereq.:** MATH-104.

MATH-106 Precalculus Mathematics, 4 cr. The content of MATH-104 and MATH-105 combined in one accelerated course. **Prereq.:** MATH-102 or placement test.

MATH-107 Calculus I, 4 cr. Introduction to analytic geometry, limits and derivatives, applications, integration, fundamental theorem of calculus. **Prereq.:** MATH-106 or equivalent.

MATH-110 Finite Mathematics for Business and the Social Sciences, 4 cr. Introduction to matrices, linear programming and probability with emphasis on mathematical models in the social, managerial and behavioral sciences and applications of decision problems. **Prereq.:** MATH-102 or placement test.

MATH-140 Personalized Computing for Mathematicians, 3 cr. Basic and Fortran programming with an emphasis on designing algorithms to solve problems in mathematics. **Prereq. or Coreq.:** MATH-107.

MATH-202 Calculus II, 4 cr. Inverse trigonometric functions, differentiation of transcendental functions, fundamental integration formulas, integration techniques, solid analytic geometry, infinite series, power series, functions of several variables. **Prereq.:** MATH-107.

MATH-203 Calculus III, 4 cr. Multiple integrals, functions of several variables, indeterminate forms, improper integrals. **Prereq.:** MATH-202.

MATH-243 Linear Algebra I, 3 cr. Matrices and systems of linear equations, analytic geometry in n-space, introduction to vector spaces, determinants and eigenvectors. **Prereq.:** MATH-107.

MATH-251 Discrete Mathematics, 3 cr. Logic and axiomatics of mathematics, basic set theory, and development of the rational numbers from Peano's axioms. **Prereq. or Coreq.:** MATH-107.

MATH-273 Statistics with Applications, 4 cr. Concepts of statistical inference including elements of descriptive statistics, numerical characteristics of observed distributions, elements of probability calculus, probability models, elements of sampling methodology, inference procedures, tests of statistical hypotheses. A research project and computer usage are required. **Prereq.:** MATH-102 or placement test.

MATH-275 Statistics, 3 cr. Processes of classifying and drawing conclusions from data obtained from observation, experiment, or sampling. Decision-making under uncertainty with emphasis on the behavioral fields. Study of frequency distributions and their use in the decision-making process. Usage of computer and prepared software is required. **Prereq.:** MATH-104 or equivalent.

MATH-276 Statistics II, 3 cr. Continuation of MATH-273 or MATH-275. Further discussion of regression and correlation. ANOVA and its applications. Nonparametric tests as applied to some case studies. Computer usage is required. **Prereq.:** MATH-273 or MATH-275.

MATH-301 Ordinary Differential Equations I, 3 cr. Introduction to differential equations and methods of solving differential equations. **Prereq.:** MATH-203.

MATH-302 Ordinary Differential Equations II, 3 cr. Classical equations such as the hypergeometric differential equation, the Legendre differential equation, Legendre polynomials, Bessel's differential equations, and Bessel functions. **Prereq.:** MATH-301.

MATH-303 Partial Differential Equations, 3 cr. Introduction to partial differential equations and methods of finding solutions. **Prereq.:** MATH-301.

- MATH-304 Introduction to Numerical Analysis, 3 cr.** Iterative methods for the solution of equations; systems of linear equations; interpolation and numerical integration; numerical methods in differential equations. *Prereq.: MATH-203.*
- MATH-305 Probability Theory and Applications I, 3 cr.** Introduction to mathematical probability. Fundamentals and axioms; probability spaces; combinatorial probability; conditional probability; random variables; generating functions; binomial, Poisson and normal distributions; law of large numbers and central limit theorem. Applications to selected random processes. *Prereq.: MATH-203.*
- MATH-306 Operations Research, 3 cr.** Mathematical methods of optimization, game theory, probability and statistics applied to queueing theory, linear and dynamic programming. *Prereq.: MATH-203 and MATH-243.*
- MATH-309 Numerical Analysis II, 3 cr.** Iterative techniques in matrix algebra, nonlinear systems, initial value problems for ordinary differential equations, boundary value problems for ordinary differential equations, partial differential equations. *Prereq.: MATH-304.*
- MATH-312 Foundations of Geometry, 3 cr.** Study of Euclidean and non-Euclidean geometry. *Prereq.: MATH-243.*
- MATH-321 History of Mathematics, 3 cr.** Chronological survey of the growth of the philosophy of mathematics, and of famous mathematicians and their contribution to the development of modern mathematics. *Prereq.: MATH-202.*
- MATH-322 Number Theory, 3 cr.** Properties of rational integers, congruences, quadratic residues, and Diophantine equations. *Prereq.: MATH-243.*
- MATH-323 Seminars in Mathematics, 1 cr.** Intensive study in selected areas. *Prereq.: consent of instructor.*
- MATH-324 Independent Study in Mathematics, 3 cr.** Individual investigation into a topic of interest of the student's choice. *Prereq.: consent of instructor.*
- MATH-325 Foundations of Analysis I, 3 cr.** Foundations of calculus; introduction to functions of a real variable; continuous functions, limits. *Prereq.: MATH-203.*
- MATH-326 Real Analysis, 3 cr.** An introduction to the methods of classical analysis as applied to the formulation of the theory of Riemann integrable functions and to the theoretical examination of the behavior of sequences and series of functions of a real variable. *Prereq.: MATH-325.*
- MATH-328 Complex Variables, 3 cr.** Introduction to the functions of a complex variable: Cauchy-Riemann equations, Cauchy integral theorems, and series expansions. *Prereq.: MATH-325.*
- MATH-331 Foundations of Algebra I, 3 cr.** Introduction to abstract algebraic systems: groups, rings, fields, permutations, and polynomials. *Prereq.: MATH-243.*
- MATH-332 Foundations of Algebra II, 3 cr.** Continuation of topics addressed in MATH-331; Galois theory. *Prereq.: MATH-331.*
- MATH-334 Mathematical Statistics I, 3 cr.** Introduction to the methods of mathematical statistics; fundamentals of probability calculus; sampling and sampling distributions; parametric point estimation; Bayes estimators; parametric

- interval estimation; tests of hypotheses; nonparametric methods. *Prereq.: MATH-203 and MATH-305.*
- MATH-336 Mathematical Statistics II, 3 cr.** Introduction to methods of regression and correlation theory. Simple linear regression; bivariate normal distribution; regression of several independent variables; experimental design and analysis of variance. *Prereq.: MATH-334.*
- MATH-337 Theory of Equations, 3 cr.** Study of algebraic equations, existence and properties of solutions; algebraic methods of solution; numerical and algorithmic methods of solution. *Prereq.: MATH-107 and MATH-243.*
- MATH-338 Advanced Calculus: Single Variable, 3 cr.** Advanced treatment of topics from single variable calculus, differentiation, integration, power series, improper integrals, gamma functions and Laplace transforms with emphasis on both theory and applications. *Prereq.: MATH-203.*
- MATH-339 Advanced Calculus: Multi-variable, 3 cr.** Advanced treatment of topics from the calculus of several variables using topology and linear algebra as tools. Partial differentiation, multiple integration, Green's theorem are treated both theoretically and with a view towards applications. *Prereq.: MATH-203 and MATH-243.*
- MATH-343 Linear Algebra II, 3 cr.** A continuation of MATH-243 with emphasis on computational methods and applications. *Prereq.: MATH-243.*
- MATH-356 Mathematics Structure I, 3 cr.** Designed to reinforce the mathematical background of the elementary school teacher; emphasis on the pedagogical, historical and mathematical problems involved in the transition from the traditional to the modern program in arithmetic. *Prereq.: graduate standing.*
- MATH-357 Mathematical Functions, 3 cr.** For elementary school teachers. The function concept; polynomial functions; solution of linear and quadratic equations; simultaneous equations; the binomial theorem; circular functions; solution of triangles; trigonometric identities and equations; exponential and logarithmic functions; rectangular and polar coordinate systems; the conic sections. *Prereq.: MATH-356.*
- MATH-361 Set Theory, 3 cr.** Introduction to set theory; cardinal and ordinal arithmetic; order-types of the natural, rational and real numbers, the axiom of choice and its consequences; the continuum hypothesis. *Prereq.: MATH-203, MATH-243, or consent of instructor.*
- MATH-362 Metric Spaces and Topology, 3 cr.** Metric spaces with an introduction to abstract topological spaces; continuous functions, completeness, compactness, connectedness, curves. *Prereq.: MATH-325.*
- MATH-365 Statistical Computer Packages, 3 cr.** Study of topics from SAS, SPSS, BMDP, and MINIT AB. *Prereq.: MATH-336.*
- MATH-370 Workshop in Actuarial Mathematics, 3 cr.** Some 300 problems from calculus, classical algebra, mathematical probability, and statistics are solved. The nature of the problems is specified in sample examination questions published by the Society of Actuaries. May be repeated for credit. *Prereq.: MATH-203 and consent of instructor.*

- MATH-371 Theory of Interest, 3 cr.** Introductions to the mathematical theory and practical applications of compound interest. The course is designed to prepare students of actuarial mathematics for the examination of the Society of Actuaries. *Prereq.: MATH-304.*
- MATH-390 Calculus for High School Teachers I, 4 cr.** Limits, the derivative, application of the derivative, integrals, the fundamental theorem of calculus and transcendental functions. *Prereq.: MATH-357.*
- MATH-391 Calculus for High School Teachers II, 4 cr.** Techniques of integration, applications of integration, infinite series and numerical techniques. *Prereq.: MATH-390.*
- MATH-401 Number Theory for the Elementary School Teacher, 3 cr.** Study of topics from number theory applicable to the elementary school curriculum, grades 5 to 8. *Prereq.: graduate standing and MATH-435.*
- MATH-402 Modern Algebra for the Elementary School Teacher, 3 cr.** Study of topics from modern algebra applicable to the elementary school curriculum, grades 5 to 8. *Prereq.: graduate standing and MATH-435.*
- MATH-403 Modern Geometry for the Elementary School Teacher, 3 cr.** Study of topics from modern geometry applicable in the elementary school curriculum, grades 5 to 8. *Prereq.: graduate standing and MATH-435.*
- MATH-410 Modern Analysis for the Elementary School Teacher, 3 cr.** Limits and continuity, derivatives, maxima and minima, integral calculus, applications. *Prereq.: graduate standing and MATH-435.*
- MATH-421 Modern Geometry, 3 cr.** Classification of geometrical systems; introduction to Euclidean and non-Euclidean geometries, projective geometry; finite geometries. *Prereq.: graduate standing, MATH-312, or consent of instructor.*
- MATH-430 Discrete Mathematical Structures, 3 cr.** Provides a working knowledge of mathematical logic, sets, relations, functions, graphs, and counting techniques. *Prereq.: admission to the MS Mathematics program.*
- MATH-435 Mathematical Structure II, 3 cr.** The real number system, mathematical systems, inductive and deductive methods, permutations and combinations; brief introduction to groups, rings, fields, vector spaces, matrices, and determinants. *Prereq.: graduate standing and MATH-356.*
- MATH-438 Elementary Probability and Statistics for Teachers, 3 cr.** Study of topics from probability and statistics applicable to the elementary school curriculum, grades 5-8. *Prereq.: graduate standing, MATH-357 and MATH-435.*
- MATH-439 Computers in Education, 3 cr.** Investigation into the use of computers for CAI, statistical packages and solutions of mathematical problems. Students use the computer and learn to write programs in either Basic or Fortran. *Prereq.: graduate standing and MATH-438.*
- MATH-441 Multivariate Statistical Analysis, 3 cr.** The essential methods of the multivariate statistical analysis; Hotelling's T, discriminant function, principal components, factor analysis, canonical correlations and cluster analysis with emphasis on applications and real data analysis. *Prereq.: graduate standing and MATH-336.*

- MATH-442 Applied Regression Analysis, 3 cr.** Methodology of regression analysis with attention to model building, evaluating fit, and examining reliability of the model; regression and general least squares theory, estimation of regression coefficients, polynomial regression, step-wise regression, residual analysis, choice of transformation for variables and forecasting; with applications and real data analysis. *Prereq.: graduate standing and MATH-336.*
- MATH-443 Experimental Design, 3 cr.** Basic topics and ideas in experimental design; experiments with single or multiple factors, Latin Square designs, Graeco-Latin Square designs, plot techniques, the use of confounding. Applications and data analysis are performed with computer assistance. *Prereq.: graduate standing and MATH-336.*
- MATH-457 Recent Trends in Mathematics, 3 cr.** Extended applications of mathematical thinking, operations research, mathematical models, information theory, theory of games, and linear programming. *Prereq.: graduate standing and MATH-435.*
- MATH-462 Advanced Topics in Topology, 3 cr.** Possible topics include homology and homotopy theory, plane topology, curve theory, function spaces, advanced topics in point set topology. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-421.*
- MATH-463 Advanced Topics in Complex Variables, 3 cr.** Possible topics include Hadamard's theory of entire functions, topological theory of complex integration, approximation of analytic functions by rational functions and polynomials (Runge theorems), geometric function theory, Riemann surfaces and algebraic functions, elliptic functions. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-328.*
- MATH-464 Advanced Topics in Real Analysis, 3 cr.** Possible topics include measure and integration, functional analysis, Banach algebras, topological groups, calculus of variations, constructive real analysis, non-standard real analysis. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-326.*
- MATH-465 Advanced Topics in Numerical Analysis, 3 cr.** Possible topics include numerical linear algebra, iteration methods and convex programming, numerical methods for ordinary and partial differential equations, functional approximation and data analysis, digital spectral analysis, design and analysis of mathematical software, and mathematical methods in computer graphics. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-304.*
- MATH-466 Advanced Topics in Geometry, 3 cr.** Possible topics include projective geometry, metric geometry, differential manifolds, finite geometries. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-421.*
- MATH-467 Advanced Topics in Algebra, 3 cr.** Possible topics include group theory, ring theory, field theory, linear algebra, categorical algebra and lattice theory. Consult the Schedule of Classes for specific topics. *Prereq.: graduate standing and MATH-436.*
- MATH-469 Advanced Topics in Mathematical Statistics, 3 cr.** Possible topics include simultaneous stochastic

equations models, multivariate analysis, analysis of variance and covariance, non-parametric statistics, Bayesian inference, and sampling theory. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing and MATH-336.

MATH-471 Introduction to Stochastic Models, 3 cr. Introduction to the basic mathematical aspects of the theory of stochastic processes and its applications with emphasis on problem solving; introduction to a variety of modeling approaches. Problem formulation is stressed. Computers are used in performing the calculations involved and as a simulation device to exhibit behavior of random processes. **Prereq.:** graduate standing and MATH-305.

MATH-472 Simulation Modeling and Analysis, 3 cr. Design and analysis of computer simulations of complex systems. Network, discrete event and continuous models are treated in a unifying setting. Computer models of a variety of systems are implemented and analyzed using a general purpose simulation language. **Prereq.:** graduate standing, MATH-334 and Fortran competency.

MATH-473 Advanced Topics in Operations Research, 3 cr. Possible topics include applied graph theory; simulation analysis of complex systems; times series analysis. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing and MATH-307.

MATH-491 Independent Study in Mathematics, 1 cr. Individual investigation into a topic of interest of the student's choice. **Prereq.:** graduate standing and consent of instructor.

MATH-492 Independent Study in Mathematics, 2 cr. (See MATH-491 for description.)

MATH-493 Independent Study in Mathematics, 3 cr. (See MATH-491 for description.)

MATH-494 Thesis Seminar—Mathematics, 6 cr. Students conduct research and write a thesis to fulfill requirements for the Master of Science degree. **Prereq.:** acceptance to degree candidacy for the Master of Science in Mathematics and approval of the department.

MATH-495 Project in Mathematics, 3 cr. Students prepare a project involving both the theory and computational tools learned in their concentration. Students present both written and oral reports to the department. **Prereq.:** acceptance to degree candidacy for the Masters in Mathematics, and approval of the department.

MUSIC

Charles A. Anderson, D.M.A., Professor
James A. Brokaw II, Ph.D., Assistant Professor
Ronald Combs, D.M.A., Professor
Helen J. Engler, M.M., Assistant Professor, Chairperson
Libby Komaiko Fleming, B.A., Assistant Professor (Dance)
Edgar Gangware, Ph.D., Professor
Aaron Horne, D.M.A., Professor
Phyllis Hurt, D.M.A., Assistant Professor
Sylvie L. Koval, M.M., Associate Professor
Gordon H. Lamb, Ph.D., Professor
James A. Lucas, D.M.A., Professor
Elyse J. Mach, Ph.D., Professor
Vincent Malek, Ph.D., Professor

Michael McClary, M.M., Assistant Professor
Marie McGuckin, M.M., Assistant Professor
Vincent Oddo, Ph.D., Professor
William Schutt, M.M., Associate Professor
Constance J. Speake, D.M.A., Associate Professor
Venetia Stifler, B.A., Assistant Professor (Dance)

The Department of Music offers courses leading to the degrees of Bachelor of Arts and Master of Arts. The programs prepare students for professional careers and provide a background for personal enrichment and general use.

Undergraduate programs are available in:
Performance
Theory
Piano Pedagogy
Music History and Literature
Secondary Education—Vocal Music
Secondary Education—Instrumental Music

Graduate programs are available in:
Music Education
Applied Music Pedagogy

The Department offers three minors:
Individualized Music Minor
Individualized Dance Minor
Minor in Music for the Bachelor of Arts
in Elementary Education

To declare a major or minor, students must apply to the Department of Music for assignment to the program. Students must complete the requirements in effect when their declaration is accepted. Transfer students should request a departmental evaluation of transferred credits for acceptance toward major or minor requirements during their first term at the University. Students entering a major program in Music are assumed to have acquired music reading ability, performance experience in school groups and/or as soloists, a strong sensitivity to music and the desire to communicate it to others. Those without such backgrounds will have to complete additional preparation which may extend the time to graduation. Students who have declared a major or minor are placed with a faculty program advisor who assists in the selection of appropriate course work and in meeting all requirements. Majors must obtain their advisors' approval for each registration.

In addition to fulfilling course requirements, music majors and minors must meet departmental requirements for graduation. Music majors' requirements include a component of seven terms of participation in large ensembles selected with the advisors' approval and compatible with the area of specialization. Graduate students must complete three terms of ensemble. Recorded attendance at three events each fall and winter term and two events each spring/summer term selected from the Department of Music Concert Series is required of all music majors and minors. Students participating in a concert earn one-half attendance credit and may

apply no more than two such credits per year. Performance majors must present a senior recital or extended jury. Secondary Education majors must obtain departmental approval for admission to student teaching. Students in Applied Music are not permitted to study simultaneously with two teachers in the same field.

UNDERGRADUATE PROGRAMS

Major in Music for the Bachelor of Arts Degree

Emphasis I: Vocal and Instrumental Performance

Required Courses:

MUS-121	Music Theory I	3 cr.
MUS-122	Music theory II	3 cr.
MUS-201	Music Theory III	3 cr.
MUS-202	Music Theory IV or	
MUS-301	Counterpoint I	3 cr.
MUS-124	Sight Singing and Ear Training I	2 cr.
MUS-125	Sight Singing and Ear Training II	2 cr.
MUS-203	Music Before 1600	3 cr.
MUS-204	Music From 1600 through Beethoven	3 cr.
MUS-205	Music after Beethoven	3 cr.
MUS-223	Instrumental Conducting or	
MUS-224	Choral Conducting	2 cr.
Applied Music in the major	performance area	20 cr.
Private study in voice or instrument whereby	at least twelve credit hours are selected from:	
MUS-351	Applied Music	1 cr.
MUS-352	Applied Music	2 cr.
MUS-353	Applied Music	3 cr.
MUS-354	Applied Music	4 cr.
Piano*		6 cr.
MUS-112	Class Piano I	2 cr.
MUS-113	Class Piano II	2 cr.
MUS-114	Class Piano III or	
MUS-152W	Applied Music: Piano	2 cr.
Applied Music in a secondary	area of performance	6 cr.
Study of one or more areas of performance in addition	to the major performance area.	
Elective		3 cr.
It is strongly suggested that students take		
a music history and literature course relating to		
their major performance area		
Total		62 cr.
*Piano Majors must replace MUS-112, MUS-113 and MUS-114 with:		
MUS-127	Harmony and Ear Training at	
	the Keyboard I	2 cr.
MUS-128	Harmony and Ear Training at	
	the Keyboard II	2 cr.
Elective		2 cr.

Emphasis II: Music Theory

Required Courses:

MUS-121	Music Theory I	3 cr.
MUS-122	Music Theory II	3 cr.
MUS-201	Music Theory III	3 cr.
MUS-202	Music Theory IV	3 cr.
MUS-301	Counterpoint I	3 cr.
MUS-302	Counterpoint II	3 cr.
MUS-305	Form and Analysis I	3 cr.
MUS-306	Form and Analysis II	3 cr.
MUS-124	Sight Singing and Ear Training I	2 cr.
MUS-125	Sight Singing and Ear Training II	2 cr.
MUS-127	Harmony and Ear Training at	
	the Keyboard I	2 cr.
MUS-128	Harmony and Ear Training at	
	the Keyboard II	2 cr.
MUS-203	Music Before 1600	3 cr.
MUS-204	Music From 1600 through Beethoven	3 cr.
MUS-205	Music After Beethoven	3 cr.
Select three courses:		9 cr.
MUS-312	Beethoven	3 cr.
MUS-315	Bach and Handel	3 cr.
MUS-316	Haydn and Mozart	3 cr.
MUS-317	Music of the Romantic Era	3 cr.
MUS-318	Music of the Twentieth Century	3 cr.
MUS-319	Music of America	3 cr.
MUS-323	Music of the Renaissance Era	3 cr.
Select two courses:		6 cr.
MUS-309	Studies in Instrumental Music	3 cr.
MUS-310	Studies in Vocal Music	3 cr.
MUS-311	Studies in Keyboard Music	3 cr.
MUS-321	Seminar in Music History	3 cr.
Piano		6 cr.
MUS-112	Class Piano I	2 cr.
MUS-113	Class Piano II	2 cr.
MUS-114	Class Piano III or	
MUS-152W	Applied Music: Piano	2 cr.
Total		62 cr.

Emphasis III: Piano Pedagogy

Required Courses:

MUS-121	Music Theory I	3 cr.
MUS-122	Music Theory II	3 cr.
MUS-201	Music Theory III	3 cr.
MUS-202	Music Theory IV or	
MUS-301	Counterpoint I	3 cr.
MUS-124	Sight Singing and Ear Training I	2 cr.
MUS-127	Harmony and Ear Training at	
	the Keyboard I	2 cr.
MUS-305	Form and Analysis I	3 cr.
MUS-203	Music Before 1600	3 cr.
MUS-204	Music From 1600 through Beethoven	3 cr.
MUS-205	Music After Beethoven	3 cr.
MUS-311	Studies in Keyboard Music	3 cr.

Applied Music.....	18 cr.
Private study in piano whereby at least ten credit hours are selected from:	
MUS-351 Applied Music.....	1 cr.
MUS-352 Applied Music.....	2 cr.
MUS-353 Applied Music.....	3 cr.
MUS-354 Applied Music.....	4 cr.
MUS-331 Applied Music Pedagogy I: Piano.....	3 cr.
MUS-332 Applied Music Pedagogy II: Piano.....	2 cr.
MUS-223 Instrumental Conducting or MUS-224 Choral Conducting	2 cr.
Electives: (two courses selected in consultation with advisor from Psychology, Music Theory, or Music History and Literature)	6 cr.
Total	62 cr.

Emphasis IV: Music History and Literature

Required Courses:

MUS-121 Music Theory I	3 cr.
MUS-122 Music Theory II	3 cr.
MUS-201 Music Theory III	3 cr.
MUS-202 Music Theory IV	3 cr.
MUS-301 Counterpoint I	3 cr.
MUS-305 Form and Analysis I	3 cr.
MUS-124 Sight Singing and Ear Training I.....	2 cr.
MUS-125 Sight Singing and Ear Training II.....	2 cr.
MUS-203 Music Before 1600	3 cr.
MUS-204 Music From 1600 through Beethoven	3 cr.
MUS-205 Music After Beethoven	3 cr.
Select two courses:.....	6 cr.
MUS-309 Studies in Instrumental Music	3 cr.
MUS-310 Studies in Vocal Music	3 cr.
MUS-311 Studies in Keyboard Music	3 cr.
Select four courses:.....	12 cr.
MUS-312 Beethoven	3 cr.
MUS-315 Bach and Handel	3 cr.
MUS-316 Haydn and Mozart	3 cr.
MUS-317 Music of the Romantic Era.....	3 cr.
MUS-318 Music of the Twentieth Century	3 cr.
MUS-319 Music of America.....	3 cr.
MUS-323 Music of the Renaissance Era.....	3 cr.
Piano	6 cr.
MUS-112 Class Piano I	2 cr.
MUS-113 Class Piano II	2 cr.
MUS-114 Class Piano III or MUS-152W Applied Music: Piano	2 cr.
After successfully completing an audition for piano proficiency, the student may fulfill these required hours in other areas of Applied Music.	
Electives: (two courses selected from Music History and Literature or Music Theory)	6 cr.
Total	61 cr.

Emphasis V a: Secondary Education: Vocal Music

Required Courses:

MUS-121 Music Theory I	3 cr.
MUS-122 Music Theory II	3 cr.
MUS-201 Music Theory III	3 cr.
MUS-202 Music Theory IV or MUS 301 Counterpoint I	3 cr.
MUS-124 Sight Singing and Ear Training I.....	2 cr.
MUS-125 Sight Singing and Ear Training II.....	2 cr.
MUS-203 Music Before 1600	3 cr.
MUS-204 Music From 1600 through Beethoven	3 cr.
MUS-205 Music After Beethoven	3 cr.
Applied Music.....	12 cr.
Private study in voice whereby at least six credit hours are selected from:	
MUS-351 Applied Music.....	1 cr.
MUS-352 Applied Music.....	2 cr.
MUS-353 Applied Music.....	3 cr.
MUS-354 Applied Music.....	4 cr.
Piano	6 cr.
MUS-112, Class Piano I; MUS-113 Class Piano II; MUS-114 Class Piano III; or MUS-152 Applied Music-Piano.....	2 cr.
MUS-224 Choral Conducting.....	2 cr.
MUS-391 Contemporary Music Education, Grades K-6.....	3 cr.
Electives: (two courses selected from Music History and Literature or Music Theory)	6 cr.
Total	54 cr.
C&S-SCED-303I Methods and Techniques of Teaching Music in the Secondary Schools: Instrumental	2 cr.
C&I-SCED-303V Methods and Techniques of Teaching Music in the Secondary Schools: Vocal.....	2 cr.
MUS-393L Seminar in Music Education, Clinical Field Experience (taken concurrently with C&I-SCED-303)	2 cr.
(Included in professional education requirements)	
Students wishing to be certified to teach music in secondary schools should consult the Secondary Educa- tion section of this catalog.	

Emphasis V b: Secondary Education: Instrumental Music

Required Courses:

MUS-121 Music Theory I	3 cr.
MUS-122 Music Theory II	3 cr.
MUS-201 Music Theory III	3 cr.
MUS-202 Music Theory IV or MUS-301 Counterpoint I.....	3 cr.
MUS-124 Sight Singing and Ear Training I.....	2 cr.
MUS-125 Sight Singing and Ear Training II.....	2 cr.
MUS-203 Music Before 1600	3 cr.
MUS-204 Music From 1600 through Beethoven	3 cr.

MUS-205 Music After Beethoven	3 cr.
Applied Music.....	11 cr.
Private study in instrument whereby at least six credit hours are selected from:	
MUS-351 Applied Music.....	1 cr.
MUS-352 Applied Music.....	2 cr.
MUS-353 Applied Music.....	3 cr.
MUS-354 Applied Music.....	4 cr.
Piano	4 cr.
MUS-112 Class Piano I	2 cr.
MUS-113 Class Piano II	2 cr.
MUS-152W Applied Music: Piano	2 cr.
MUS-223 Instrumental Conducting	2 cr.
MUS-308 Orchestration	3 cr.
Select three courses:.....	6 cr.
MUS-115 Instrumental Music Studies-Brass Instruments	2 cr.
MUS-116 Instrumental Music Studies-Percussion Instruments	2 cr.
MUS-117 Instrumental Music Studies-String Instruments	2 cr.
MUS-118 Instrumental Music Studies-Woodwind Instruments	2 cr.
MUS-391 Contemporary Music Education, Grades K-6.....	3 cr.
Total	54 cr.
C&I-SCED-303I Methods and Techniques of Teaching Music in the Secondary Schools: Instrumental	2 cr.
C&I-SCED-303V Methods and Techniques of Teaching Music in the Secondary Schools: Vocal.....	2 cr.
MUS-393L Seminar in Music Education: Clinical Field Experience (taken concurrently with C&I-SCED-303)	2 cr.
(Included in professional education requirements)	
Students wishing to be certified to teach music in secondary schools should consult the Secondary Educa- tion section of this catalog.	

Minor in Music for the Bachelor of Arts Degree in Elementary Education

Required Courses:

Music Theory	6 cr.
MUS-102 Music Fundamentals I or MUS-104 Music Concepts	3 cr.
MUS-121 Music Theory I	3 cr.
Applied Music.....	6 cr.
MUS-112 Class Piano I or MUS-113 Class Piano II or MUS-114 Class Piano III or MUS-152W Applied Music: Piano	2 cr.
MUS-110 Class Voice I or MUS-111 Class Voice II or MUS-152V Applied Music: Voice	2 cr.
MUS-120 Class Guitar I or MUS-123 Class Guitar II.....	2 cr.

Music Education.....	9 cr.
MUS-391 Contemporary Music Education, Grades Kindergarten through Six	3 cr.
MUS-394B Seminar in Music Education: Orff and Kodaly	3 cr.
MUS-393C Seminar in Music Education: Music Therapy	2 cr.
or MUS-393D Seminar in Music Education: Music for the Exceptional Child	2 cr.
or MUS-394D Seminar in Music Education: Exceptional Child—Music and Drama	3 cr.
Electives	9 cr.
Select from among the following:	
MUS-351 Applied Music	1 cr.
MUS-352 Applied Music	2 cr.
MUS-353 Applied Music	3 cr.
MUS-354 Applied Music	4 cr.
MUS-103 Music Fundamentals.....	2 cr.
MUS-205 Music After Beethoven	3 cr.
MUS-211B Music in Society: Jazz	3 cr.
MUS-393A Seminar in Music Education: Humanities	2 cr.
MUS-393F Seminar in Music Education: Instruments for Classroom Teachers	2 cr.
MUS-393J Seminar in Music Education: Methods and Materials in Jazz.....	2 cr.
MUS-393K Seminar in Music Education: Jazz Dance.....	2 cr.
MUS-394A Seminar in Music Education: Humanities	3 cr.
MUS-394F Seminar in Music Education: Instruments for Classroom Teachers	3 cr.
MUS-394J Seminar in Music Education: Methods and Materials in Jazz.....	3 cr.
HPER-PEMA-151 Fundamentals of Rhythms	3 cr.
HPER-PEMA-252 Folk, Round, and Square Dancing	1 cr.
HPER-PEMA-253 Social Dances and Latin American Rhythms.....	1 cr.
Total	30 cr.

**For a complete description of the degree program in
Elementary Education,** refer to the Elementary Education
section of this catalog.

Minor in Music (23 cr. hrs.)

In consultation with the department of Music Chairperson,
the student designs an individualized and appropriately bal-
anced program to meet personal interests and needs. Courses
are selected from the departmental curriculum and may not
include MUS-101. Students must obtain the chairperson's
approval for the total program plan.

Minor in Dance (30 cr. hrs.)

In consultation with the departmental program advisor, the
student designs an individualized and appropriately balanced
program to meet personal interests and needs. Students

entering the program must demonstrate technical ability. Students must obtain the advisor's approval for the total program plan.

Concert Series

Afternoon and evening concerts are offered on-campus throughout the year including student recitals, the UNI Chamber Music Series, the Faculty Concert Series and performances by guest artists. Approximately 80 such events are offered each season. Complete information is published in the Department of Music Concert Calendar.

Performing Groups

A variety of instrumental and vocal ensembles perform in concerts both on and off-campus and rehearse on a regular basis throughout the year. The ensembles are open to university and community members with appropriate choral/instrumental/vocal experience and commitment to artist performance. Students may enroll for credit in a maximum of three ensembles per term. Ensembles include:

Brass Ensemble	Madrigal Singers
Chamber Orchestra	Opera Workshop
Chamber Singers	Percussion Ensemble
Collegium Musicum	Recorder Ensemble
Concert Choir	String Ensemble
Concert Band	University Chorus
Jazz Band	Wind Band
Jazz Combo	Woodwind Ensemble

Computer/Electronic Music

The Department's state-of-the-art Computer/Electronic Music Studio is equipped with professional digital synthesizers and computer workstations with MIDI interfaces. Qualified students may enroll in a variety of courses utilizing the studio. The Department sponsors the annual Chicago MIDI Users Conference and intensive electronic music seminars throughout the year.

Music Learning Resources Center

The Music Learning Resources Center is a music study facility with computer assisted study materials, fully equipped listening stations, and approximately 4000 recordings and scores.

Professional Society

Open to all students, the UNI Student Chapter of the Music Educators National Conference provides opportunities for professional orientation and development, and opportunities to attend music education festivals, conventions and meetings.

Resources in Dance

Ensemble Espanol, the professional company in residence, offers qualified dance students opportunities to participate in intensive workshops throughout the year, and performs on campus regularly. The Department offers the American Spanish Dance Festival each summer with Ensemble Espanol and international guest artists. Qualified dance students may enroll for credit.

Awards

The Harold Berlinger Scholarship, the Laura Horne Memorial Award and the Joan Sachs Scholarship are awarded annually to outstanding students in Music. Undergraduate Talent Scholarships (tuition waivers) in Music and in Dance, and graduate tuition awards are available to qualified students. Complete information is available in the Department.

GRADUATE PROGRAM

Master of Arts in Music

The graduate program in music offers two areas of emphasis: Music Education and Applied Music Pedagogy. It serves (1) students preparing for college level teaching, (2) students preparing for advanced graduate studies, and (3) in-service elementary and secondary school teachers.

The program is designed especially for the convenience of the part-time student, and courses are offered in the late afternoon and evening.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College. To qualify for acceptance in the program, applicants must:

1. Demonstrate, through departmental examination, knowledge and skills in the following areas:
 - a. Harmony — written, aural, and keyboard
 - b. Sight-singing, and melodic, harmonic, and rhythmic dictation
 - c. History and Literature of Music
2. Demonstrate sufficient pianistic ability to meet program requirements.
3. In the Applied Pedagogy program, students must audition in their performance area before the appropriate committee or submit a fifteen-minute tape to the committee to demonstrate ability.

Requirements for the Degree:

Both sequences require a total of 36 credit hours of study of which at least 21 credit hours must be earned in 400-level courses, participation in large and small ensembles for a minimum of three terms, and a written and/or oral final examination. Course requirements are:

Emphasis I: Music Education

MUS-424	Music Bibliography and Research	3 cr.
MUS-493	Dynamics of a Music Curriculum	3 cr.
MUS-491	Seminar in Research in Music Education	3 cr.
MUS-492	Seminar in Administration and Supervision of School Music	3 cr.
	Applied Music	3 cr.
MUS-481	Thesis Seminar (Project or Thesis)	3 cr.

Electives (selected in consultation

with an advisor)	15 cr.
Total	36 cr.

Emphasis II: Applied Music Pedagogy

MUS-331	Applied Music Pedagogy I	3 cr.
MUS-332	Applied Music Pedagogy II	2 cr.
MUS-328	Repertoire Seminar	6 cr.
MUS-424	Music Bibliography and Research	3 cr.
	Applied Music (400-level)	12 cr.
MUS-481	Thesis Seminar (may be a recital)	3 cr.
	Electives (selected in consultation with an advisor)	7 cr.
Total	36 cr.	

COURSE OFFERINGS

MUS-101 The Musical Experience, 3 cr. A non-technical course designed to increase the listener's understanding and enjoyment of music. Not applicable towards major or minor requirements.

MUS-102 Music Fundamentals I, 3 cr. Development of skills in basic concepts of music through activities and materials appropriate to elementary school.

MUS-103 Music Fundamentals II, 2 cr. Further development of musical skills, including scales and chords, through activities and materials appropriate to elementary school.

Prereq.: MUS-102 or consent of instructor.

MUS-104 Music Concepts: An Introduction, 3 cr. Elements of music, forms and styles; lectures, discussions, readings, recordings, and attendance at musical performances. Open to all students; recommended for prospective majors.

MUS-105 Basic Materials in Music Theory, 2 cr. Introduction to notation and perception of pitch and rhythm, including: intervals, triads, scales, meter, and key signatures, divisions of the beat, and basic concepts of sight-singing and ear training. *Prereq.: MUS-104 or consent of instructor.*

MUS-107 Class Instrumental Instruction: Strings, Brass, Woodwinds, Percussion, 2 cr. Skills in playing either strings, brass, woodwinds, or percussion; includes principles of tone production, basic technique, scales, and arpeggios. Solo and ensemble works. *Prereq.: MUS-105, MUS-104, or consent of instructor.*

MUS-110 Class Voice I, 2 cr. For beginning students in voice; fundamentals of vocal technique. *Prereq.: consent of instructor.*

MUS-111 Class Voice II, 2 cr. Continuation of MUS-110. *Prereq.: MUS-110 or consent of instructor.*

MUS-112 Class Piano I, 2 cr. For beginning piano students. Fundamentals of reading and writing music. Basic keyboard skills in major and minor keys. Outside practice required.

MUS-113 Class Piano II, 2 cr. Continuation of MUS-112. Expanded theoretical concepts and keyboard technique. Outside practice required. *Prereq.: MUS-112 or consent of instructor.*

MUS-114 Class Piano III, 2 cr. Keyboard skills in all major and minor keys. Piano literature of diverse styles. Outside practice required. *Prereq.: MUS-113 or consent of instructor.*

MUS-115 Instrumental Music Studies — Brass Instruments, 2 cr. Introduction to the techniques and skills of playing brass instruments. Care and maintenance. Study and evaluation of the music literature available for the various brass instruments. *Prereq.: MUS-121 or consent of instructor.*

MUS-116 Instrumental Music Studies — Percussion Instruments, 2 cr. Introduction to the techniques and skills of playing percussion instruments. The use of percussion instruments in various types of instrumental ensembles. *Prereq.: MUS-121 or consent of instructor.*

MUS-117 Instrumental Music Studies — String Instruments, 2 cr. Introduction to the techniques and skills of playing string instruments. Care and maintenance. Study and evaluation of the music literature available for the various string instruments. *Prereq.: MUS-121 or consent of instructor.*

MUS-118 Instrumental Music Studies — Woodwind Instruments, 2 cr. Introduction to the techniques and skills of playing woodwind instruments. Care and maintenance. Study and evaluation of the music literature available for the various woodwind instruments. *Prereq.: MUS-121 or consent of instructor.*

MUS-120 Class Guitar I, 2 cr. Basic skills in guitar; basic chords and chord progressions, strumming techniques, playing a simple melodic line, and reading guitar tablature as well as standard musical notation. *Prereq.: MUS-102 or consent of instructor.*

MUS-121 Music Theory I, 3 cr. Study of harmonic materials in tonal music and standard notational practice. Includes written and aural skills development. Structure, doubling, spacing, voice-leading, triads and inversions. *Prereq.: MUS-104, MUS-105.*

MUS-122 Music Theory II, 3 cr. Continuation of MUS-121. Advancing written and aural skills. Phrase structure, cadences, harmonic progression, harmonization techniques, nonharmonic tones. *Prereq.: MUS-121.*

MUS-123 Class Guitar II, 2 cr. Continuation of MUS-120. More complex and varied chord formations and strumming techniques; note reading of more difficult melodic lines; basics of classical guitar technique. *Prereq.: MUS-120 or consent of instructor.*

MUS-124 Sight-Singing and Ear Training I, 2 cr. Practice and application of sight-singing techniques, ear training procedures, and related aural/oral skills. *Prereq.: MUS-121 or consent of instructor.*

MUS-125 Sight-Singing and Ear Training II, 2 cr. Continuation of MUS-124. *Prereq.: MUS-124 or consent of instructor.*

MUS-127 Harmony and Ear Training at the Keyboard I, 2 cr. Skills in applying harmonic and melodic concepts and techniques at a keyboard instrument. *Prereq.: MUS-121 and MUS-112 or consent of instructor.*

MUS-128 Harmony and Ear Training at the Keyboard II, 2 cr. Continuation of MUS-127. *Prereq.: MUS-127 or consent of instructor.*

MUS-130 Fundamentals of MIDI, 3 cr. Introduction to digital technology and its musical applications. Fundamental

skills and applications for using synthesizers, computers, drum machines and other instruments which utilize Musical Instrument Digital Interface. Lectures, demonstrations and hands-on experience in electronic music lab. **Prereq.:** consent of instructor.

MUS-151 Applied Music, 1 cr. Individual study in voice or any instrument for development of performing skills and musical understanding; knowledge of the repertoire for the voice or specific instrument at an appropriate level of performing ability. **Prereq.:** consent of instructor or department chairperson.

MUS-152 Applied Music, 2 cr. (See MUS-151 for description.)

MUS-153 Applied Music, 3 cr. (See MUS-151 for description.)

MUS-154 Applied Music, 4 cr. (See MUS-151 for description.)

MUS-201 Music Theory III, 3 cr. Study of seventh chords, secondary dominants, altered nonharmonic tones, modulation, borrowed chords, augmented sixth chords. Advancing analytical and written skills. **Prereq.:** MUS-122 or consent of instructor.

MUS-202 Music Theory IV, 3 cr. Writing and analysis. Study of Neapolitan sixth; diminished sevenths; altered dominants; chromatic mediants; modulation to foreign keys; ninth, eleventh and thirteenth chords. **Prereq.:** MUS-201 or consent of instructor.

MUS-203 Music Before 1600, 3 cr. Survey of musical styles, types, and forms from Gregorian Chant through the Renaissance. **Prereq.:** MUS-104, MUS-121, or consent of instructor.

MUS-204 Music From 1600 Through Beethoven, 3 cr. Survey of musical styles, types, and forms in representative composers of the Baroque and Classical Periods. **Prereq.:** MUS-104, MUS-121, or consent of instructor.

MUS-205 Music After Beethoven, 3 cr. Survey of musical styles, types, and forms, in representative composers of the Romantic Period and the Twentieth Century. **Prereq.:** MUS-104, MUS-121, or consent of instructor.

MUS-211 Music in Society, 3 cr. Discriminative listening and aesthetic sensitivity to musical styles and forms in Western civilization and other cultures; lectures, discussions, readings, recordings, and attendance at musical performances. **Prereq.:** MUS-104 or consent of instructor.

MUS-221 Chorus, 1.5 cr. This activity is open to all students. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-222 Vocal Ensemble, 1.5 cr. Opera Workshop, Chamber Singers, and Madrigal Singers. Open to all enrolled students. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-223 Instrumental Conducting, 2 cr. Techniques of conducting and score reading; rehearsal techniques and interpretation. **Prereq.:** MUS-122 or consent of instructor.

MUS-224 Choral Conducting, 2 cr. Choral conducting techniques; ability to read and analyze choral scores; choral repertoire. **Prereq.:** MUS-122 or consent of instructor.

MUS-230 Advanced MIDI, 3 cr. Continuation of MUS-130. Advanced applications of digital technology as it applies to music, using computers, synthesizers, samplers and record-

ing equipment. Lectures, demonstrations and hands-on experience in electronic music lab. **Prereq.:** MUS-130 or consent of instructor.

MUS-231 Band, 1.5 cr. Open to enrolled students with instrumental experience. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-231A Wind Band, 1 cr. Wind Ensemble; advanced literature. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-234 Instrumental Ensemble, 1 cr. Open to enrolled students with instrumental experience. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-235 Instrumental Ensemble, 1.5 cr. Ensemble; advanced literature. Opportunities for school and public performance. **Prereq.:** consent of instructor.

MUS-240 Jazz Theory I, 3 cr. Bop and Post-Bop harmonic innovations, survey and harmonic analysis of music growing out of the Bebop era. Extensive study of Charlie Parker, Dizzy Gillespie, John Coltrane, Miles Davis, Wayne Shorter, and Thelonius Monk's music. Application of harmonic concepts through composition of original music. **Prereq.:** MUS-122 or consent of instructor.

MUS-241 Jazz Theory II, 3 cr. Contemporary trends in chord progressions, linear melodic tendencies, harmonization as a function of melody, inner lines and overall musical content. The use of these concepts, and principles of reharmonization and modulation in writing original composition. **Prereq.:** MUS-240 or consent of instructor.

MUS-301 Counterpoint I, 3 cr. Writing in two parts in various styles and modes, study of species and modal procedures. **Prereq.:** MUS-201 or consent of instructor.

MUS-302 Counterpoint II, 3 cr. Writing in four parts; double counterpoint, canon and fugue contrapuntal analysis. **Prereq.:** MUS-301.

MUS-305 Form and Analysis I, 3 cr. Structural and stylistic features in their musical context; motif, phrase and period; binary and ternary form, theme and variations, rondo, sonata form and unique forms. **Prereq.:** MUS-201 or consent of instructor.

MUS-306 Form and Analysis II, 3 cr. Structural and stylistic features in their musical context, early to contemporary polyphonic forms, multi-movement forms, electronic music, aleatoric music. Consideration of several approaches to structural analysis. **Prereq.:** MUS-305 or consent of instructor.

MUS-307 Class Composition, 3 cr. Composition and performance of students' original works. **Prereq.:** consent of instructor.

MUS-308 Orchestration, 3 cr. Instrumental timbres and the capabilities of instruments; scoring for instruments in a variety of combinations, including the orchestra and instrumental-vocal combinations. **Prereq.:** MUS-122 or consent of instructor.

MUS-309 Studies in Instrumental Music, 3 cr. Selected topics in instrumental literature. Consult the Schedule of Classes for specific topics. **Prereq.:** MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-310 Studies in Vocal Music, 3 cr. Selected topics in vocal literature. Consult the Schedule of Classes for specific topics. **Prereq.:** MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-311 Studies in Keyboard Music, 3 cr. Selected topics in keyboard literature, including dance types, character pieces, variations, prelude, fugue, toccata, suite, and sonata. Consult the Schedule of Classes for specific topics. **Prereq.:** MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-312 Beethoven, 3 cr. Representative compositions of Beethoven, with emphasis on the evolution of early, middle, and late period style characteristics. **Prereq.:** MUS-122, MUS-203, and MUS-204 or MUS-205, or consent of instructor.

MUS-314 Selected Studies in Music, 3 cr. Special topics in music history and/or theory. Consult the Schedule of Classes for specific topics. **Prereq.:** junior standing.

MUS-315 Bach and Handel, 3 cr. Analysis of representative vocal and instrumental compositions. Survey of biographical and bibliographical sources. **Prereq.:** MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-316 Haydn and Mozart, 3 cr. Analysis of representative vocal and instrumental compositions. Survey of biographical and bibliographical sources. **Prereq.:** MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-317 Music of the Romantic Era, 3 cr. Consideration from a historical point of view of structural, stylistic and formal aspects of the musical art of the Romantic era. **Prereq.:** MUS-122, MUS-203, MUS-204 or MUS-205, or consent of instructor.

MUS-318 Music of the Twentieth Century, 3 cr. Consideration from a historical point of view of structural, stylistic and formal aspects of the musical art of the twentieth century. **Prereq.:** MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-319 Music of America, 3 cr. Study of the development of music in America from the pre-revolutionary period to the contemporary period. **Prereq.:** MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-320 Independent Study in Music, 1 cr. Individual investigation into a topic of the student's choice. **Prereq.:** consent of instructor.

MUS-321 Seminar in Music History, 3 cr. Intensive study of specialized topics. Consult the Schedule of Classes for specific topics. **Prereq.:** consent of instructor.

MUS-322 Independent Study in Music, 3 cr. (See MUS-320 for description.)

MUS-323 Music of the Renaissance Era, 3 cr. Consideration from a historical point of view of structural, stylistic, and formal aspects of the musical art of the Renaissance Era. **Prereq.:** MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-324 Independent Study in Music, 2 cr. (See MUS-320 for description.)

MUS-325 Performance Seminar, 2 cr. Performance and critical analysis of others' performances based upon stylistic, structural, and technical factors. Consult the Schedule of Classes for specific topics. **Prereq.:** consent of instructor.

MUS-326 Songwriting, 3 cr. Techniques of songwriting; consideration and analysis of classical and folk song models; emphasis on writing lyrics, melody and accompaniment. **Prereq.:** ability to read and write music and consent of instructor.

MUS-328 Repertoire Seminar, 2 cr. Survey of the standard repertoire for different performance areas. Content varies

according to performance area studied. Consult the Schedule of Classes for specific topics. **Prereq.:** ten credit hours in major performance area or consent of instructor.

MUS-329 Advanced Conducting, 2 cr. Rehearsal techniques involved in the performance of advanced orchestral and band literature; refinements of baton technique; careful attention to interpretation of selected repertoire. **Prereq.:** MUS-223.

MUS-331 Applied Music Pedagogy I, 3 cr. Methods for Applied Music teaching for prospective and experienced teachers. **Prereq.:** twelve credit hours of Applied Music or consent of instructor.

MUS-332 Applied Music Pedagogy II, 2 cr. Primarily a practicum for prospective and experienced teachers; class discussion, practice teaching. **Prereq.:** MUS-331 or consent of instructor.

MUS-333 Internship in Music, 3 cr. Field experience in schools, community organizations, or industry. Detailed information is available in the departmental office. **Prereq.:** consent of departmental Music Internship Committee.

MUS-340 Jazz Arranging I: Big Band Arranging and Score Analysis, 3 cr. Fundamental concepts and analysis of scores composed by contemporary big band arrangers, such as Bill Holman, Thad Jones, Manny Albam, and Oliver Nelson. **Prereq.:** MUS-241 or consent of instructor.

MUS-341 Jazz Arranging II: Advanced Arranging for Large Jazz Ensemble, 3 cr. Continuation of MUS-340 with individual styles and extended techniques. Performance of written original compositions required. **Prereq.:** MUS-340 or consent of instructor.

MUS-351 Applied Music, 1 cr. Individual study in voice or any instrument for continued development of performing skills and musical artistry; knowledge of the repertoire for the specific voice or instrument at an appropriate level of performing ability. **Prereq.:** consent of instructor or department chairperson.

MUS-352 Applied Music, 2 cr. (See MUS-351 for description.)

MUS-353 Applied Music, 3 cr. (See MUS-351 for description.)

MUS-354 Applied Music, 4 cr. (See MUS-351 for description.)

MUS-360 Introduction to Instrument Maintenance, 2 cr. Workshop in the basic maintenance and repair of the piano, wind instruments, and string and percussion instruments. **Prereq.:** consent of instructor.

MUS-391 Contemporary Music Education: Grades K-6, 3 cr. Procedures and materials for teaching a basic music curriculum in the primary and intermediate self-contained classroom adapted from the Orff and Kodaly approaches; techniques for voice development, classification, two-three part singing and ensembles; use of instruments to enrich vocal, reading and listening experiences; techniques for development of performance media. **Prereq.:** MUS-103 or consent of instructor.

MUS-393 Seminar in Music Education, 2 cr. Concentrated study of specific aspects of a music education curriculum including approaches, skills, materials, and media, with emphasis on current trends. Consult the Schedule of Classes for specific topics. **Prereq.:** in-service teacher, or consent of instructor.

MUS-394 Seminar in Music Education, 3 cr. (See MUS-393 for description.)

MUS-396 Practicum in Music, 1 cr. Concentrated study of specific aspects of music performance, music theory, or music history and literature. Consult the Schedule of Classes for specific topics. *Prereq.:* in-service teacher, or consent of instructor.

MUS-397 Practicum in Music, 2 cr. (See MUS-396 for description.)

MUS-398 Practicum in Music, 3 cr. (See MUS-396 for description.)

MUS-420 Independent Study in Music, 1 cr. Individual investigation into a topic of the student's choice. *Prereq.:* graduate standing and consent of instructor.

MUS-421 Independent Study in Music, 2 cr. (See MUS-420 for description.)

MUS-422 Independent Study in Music, 3 cr. (See MUS-420 for description.)

MUS-424 Music Bibliography and Research, 3 cr. Study of basic reference and research materials in music and introduction to methods of research appropriate to music. *Prereq.:* graduate standing.

MUS-451 Applied Music, 1 cr. Individual study in voice or any instrument for continued development of performing skills and musical artistry; knowledge of the repertoire for the specific voice or instrument at an appropriate level of performing ability. *Prereq.:* consent of instructor or department chairperson, and graduate standing.

MUS-452 Applied Music, 2 cr. (See MUS-451 for description.)

MUS-453 Applied Music, 3 cr. (See MUS-451 for description.)

MUS-454 Applied Music, 4 cr. (See MUS-451 for description.)

MUS-471 Seminar in Music History: Baroque, 3 cr. In-depth study of selected topics in the music history and literature of the Baroque. Individual research topics. *Prereq.:* graduate standing and consent of instructor.

MUS-472 Seminar in Music History: Classic Era, 3 cr. In-depth study of selected topics in the music history and literature of the Classic era. Individual research topics. *Prereq.:* graduate standing and consent of instructor.

MUS-476 Theory Seminar; 20th Century Analytical Procedures and Compositional Techniques, 3 cr. Directed research, analysis and presentation of reports treating aspects of music theory in selected historical periods. Consult the Schedule of Classes for specific topics. *Prereq.:* graduate standing and consent of instructor.

MUS-480 Graduate Internship in Music, 3 cr. Advanced field experience; a practicum in either traditional or non-traditional areas of music. Main responsibility for researching, developing and completing the project lies with the student. *Prereq.:* admission to M.A. Music program, or graduate standing and consent of program advisor.

MUS-481 Thesis Seminar — Music, 3 cr. Guidance of students preparing a thesis, project or recital to fulfill requirements for the Master of Arts in Music. *Prereq.:* master's degree candidacy in music.

MUS-491 Seminar in Research in Music Education, 3 cr. Study of basic reference and research materials in music education and introduction to methods of research appropriate to music education. *Prereq.:* graduate standing.

MUS-492 Seminar in Administration and Supervision of School Music, 3 cr. Responsibilities of the music supervisor or the music department chairperson in secondary schools, including curriculum development, public relations, program finance, and scheduling. *Prereq.:* MUS-203.

MUS-493 Dynamics of a Music Curriculum, 3 cr. Problems and procedures related to the planning, development, and implementation of a music curriculum for kindergarten through grade twelve, including current trends in music curricula. *Prereq.:* graduate standing.

Dance

MUS-DANC-101 The Dance Experience, 3 cr. A non-technical introduction to the art of dance designed to enhance appreciation of styles, tradition, history, choreography, aesthetics and personalities. Lectures, films, discussion and participatory classes.

MUS-DANC-127 Latin-American Dance, 1 cr. Latin-American dance skills; choreographic development of dance routines; historical and cultural aspects of Latin-American social dances.

MUS-DANC-131 Introduction to Spanish Dance, 2 cr. Introduction to the three types of Spanish dance: Classical, Regional and Flamenco with emphasis on basic technique, and on Spain's varied music; Classical, Flamenco and Regional from the 13th through the 20th centuries.

MUS-DANC-151 Fundamentals of Rhythms, 3 cr. Basic axial and locomotor movements, spontaneous and planned interpretive response, aspects of rhythm, designing of a rhythm instrument, dramatization, marching patterns, rhythmic activities using basic dance steps, and beginning folk and square dance.

MUS-DANC-161 Spanish Dance I, 2 cr. Continuation of MUS-DANC-131 with emphasis on the mastery of two important repertory styles and their dances: Regional and Flamenco. *Prereq.:* MUS-DANC-131 or consent of instructor.

MUS-DANC-203U Field Experiences: Dance in Chicago I, 3 cr. Field experience in studios or schools. Detailed information is available in the departmental office. *Prereq.:* consent of the Dance Committee.

MUS-DANC-203V Field Experiences: Dance in Chicago II, 3 cr. Advanced field experience in studios or schools. Detailed information is available in the departmental office. *Prereq.:* consent of the Dance Committee.

MUS-DANC-203W Field Experiences: Hispanic Dance I, 3 cr. Hispanic dance field experience in studios or schools. Detailed information is available in the departmental office. *Prereq.:* consent of the Dance Committee.

MUS-DANC-204 Dance Ensemble, 3 cr. Open to enrolled students with at least intermediate skills in dance technique (ballet, modern, jazz, or combination). *Prereq.:* consent of instructor.

MUS-DANC-251 Modern Dance I, 2 cr. Practice of movement as an art form suggesting ideas and conveying feelings, including axial and locomotor movements, spontaneous and planned interpretive response, and choreography.

MUS-DANC-252 Folk, Round and Square Dance, 1 cr. Folk, national, and square dances; square dance calling; and methods of class organization and teaching.

MUS-DANC-253 Social Dance and Latin American Rhythms, 1 cr. Practice in basic patterns and routines of Latin American ballroom dances, emphasizing rhythm, adeptness, and comprehension; opportunity to design routines.

MUS-DANC-254 Modern Dance: II, 2 cr. Continuation of MUS-DANC-251. Strength, flexibility, coordination, and balance; locomotor combinations and creative exploration of rhythm and dynamic elements of dance. *Prereq.:* MUS-DANC-251 or consent of instructor.

MUS-DANC-255 Jazz Dance I, 2 cr. Fundamental techniques of jazz dance for the beginning student; blues, musical comedy, hard-rock, street dancing, and dramatic styles.

MUS-DANC-256 Ballet I, 2 cr. Fundamentals of ballet techniques for the beginning student; attendance at performances; analysis of filmed performances.

MUS-DANC-261 Spanish Dance II, 2 cr. Continuation of MUS-DANC-161 further exploring the Classical, Regional and Flamenco styles with emphasis on mastery of technique, styles, music and theatrical history. *Prereq.:* MUS-DANC-161 or consent of instructor.

MUS-DANC-351 Modern Dance III, 3 cr. Continuation of MUS-DANC-254. Techniques of Graham, Limon, and Cunningham; attendance at professional dance presentations and rehearsals; research. *Prereq.:* MUS-DANC-254 or consent of instructor.

MUS-DANC-355 Jazz Dance II, 2 cr. Continuation of MUS-DANC-255; more polished techniques and expression; blues, musical comedy, hard-rock, street dancing, and dramatic styles. *Prereq.:* MUS-DANC-255 or consent of instructor.

MUS-DANC-356 Ballet II, 2 cr. Continuation of MUS-DANC-256. Skill in performance of "school" steps and combinations. *Prereq.:* MUS-DANC-256 or consent of instructor.

MUS-DANC-357 Ballet III, 3 cr. Continuation of MUS-DANC-356. Development of greater strength, flexibility, balance, stamina; adagio, allegro, and center work. Expressive and creative elements. *Prereq.:* MUS-DANC-256 and MUS-DANC-356.

MUS-DANC-360 Dance Composition, 3 cr. Practical aspects of dance design and theoretical aspects of dance as an art form using materials presented by Louis Horst in both Pre-Classic Forms and Modern Forms. Creation of dance compositions is required. *Prereq.:* consent of instructor.

MUS-DANC-365 Costuming and Cosmetology for Dance, 3 cr. Costuming and make-up for dance.

MUS-DANC-370 Musical Resources for Dance, 3 cr. Historical survey of music composed especially for dance. Music sources of particular interest to the dancer and choreographer from primitivism to trends in new music. Students develop research techniques and resource files in one major area of their own choosing: jazz, ballet, Hispanic forms, new music, etc. *Prereq.:* consent of instructor.

MUS-DANC-371 Theory and Philosophy of Dance and the Related Arts, 3 cr. The nature of dance and its historical interrelatedness with other art forms: poetry, drama (opera), painting, and music; the role of the critic. *Prereq.:* consent of instructor.

MUS-DANC-380 Contemporary Dance Education, 3 cr. Application of educational methods to the field of dance in various settings, such as conservatory and community, and specific age and interest groups.

MUS-DANC-382 Dance Management and Grantsmanship, 3 cr. Methods of management and financing in dance. *Prereq.:* consent of instructor.

MUS-DANC-390 Seminar in Dance Performance, 3 cr. Concentrated study of specific aspects of the performance of the various major types of dance. *Prereq.:* consent of instructor.

MUS-DANC-391 Internship in Dance, 3 cr. Practicum in arts agencies, dance companies, community organizations, or arts-related industries designed by the student, a dance faculty advisor, and generally an off-campus agent. *Prereq.:* consent of instructor.

NATURAL SCIENCE

Herbert J. Stoltze, Ed.D., Professor of Biology, Coordinator

The Natural Science Program has two purposes: (1) to assist students admitted to the University without college preparation science in high school and (2) to offer a minor in natural sciences for elementary school teachers.

Freshmen admitted to the University with two deficiencies in the area of natural science must take NSCI-094 Natural Science to remove the first of these deficiencies.

Minor in Natural Science for the Bachelor of Arts Degree in Elementary Education

Required Courses:

BIOL-102	Biology of Organisms.....	3 cr.
BIOL-103	Biology of Populations	3 cr.
BIOL-201	Biology of Cells	3 cr.
CHEM-211	General Chemistry I	5 cr.
ESCI-211	Physical Geology	4 cr.
PHYS-110	Physics in Everyday Life	3 cr.
At least one 200 or 300-level course acceptable for credit in a science major from each of three departments chosen from among: Biology, Chemistry, Earth Science, and Physics		9 cr.
Total		30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

COURSE OFFERINGS

NSCI-094 Natural Science, 3 cr. (May not be applied towards graduation.) Introduction to the natural sciences, including biology, chemistry, earth science, and physics; development of basic skills needed for general education science courses and introduction to the scientific method. For students with a minimal background in science and mathematics.

PHILOSOPHY

Roger W. Gilman, Ph.D., Assistant Professor
Sarah L. Hoagland, Ph.D., Professor
Stanley R. Kerr, Ph.D., Associate Professor
Hugh S. Moorhead, Ph.D., Professor, Chairperson
James Rizik, Ph.D., Assistant Professor

Philosophy, broadly defined, is the systematic inquiry into some of the problems of human existence. These problems are ones which cannot be dealt with by the methods of the sciences, and ones whose structures are based strictly on **rational argument**. In this sense, the study of philosophy, through the broad humanistic background that it provides, has always been an essential, perhaps the **most** essential, ingredient of a liberal education.

Development of the abilities to reflect, analyze and think critically, which result from the study of philosophy, enables the student to understand and correlate all the insights garnered from other disciplines. The varied perspectives that philosophy provides, from the fields of religion, ethics, politics and art, guide the student in his or her search for a sound sense of values. At the same time, philosophy adds a distinctive emphasis on questions of meaning, from linguistic expressions to life itself, and calls for justification of claims to knowledge from any source.

The primary goals of the department are to contribute significantly to the liberal education of university students, to prepare majors for advanced studies in their chosen field, and to help students in their various future professional activities by acquainting them with applied philosophy.

UNDERGRADUATE PROGRAMS

Major in Philosophy for the Bachelor of Arts Degree

The Department of Philosophy offers courses leading to the degree of Bachelor of Arts.

Majors must maintain a 2.5 (on a 4.0 scale) grade point average in philosophy courses.

Required Courses:

PHIL-201	Logic I.....	3 cr.
PHIL-213	Ethics.....	3 cr.

PHIL-222	History of Ancient Philosophy.....	3 cr.
PHIL-241	History of Modern Philosophy.....	3 cr.
PHIL-332	Contemporary Philosophy.....	3 cr.
PHIL-383	Seminar in Philosophy.....	3 cr.
Six hours of electives at the 300-level.....		6 cr.
Additional electives.....		6 cr.
Total		30 cr.

Minor in Philosophy (18 cr. hrs.)

Required Courses:

PHIL-213	Ethics.....	3 cr.
One course in the history of philosophy.....		3 cr.
One course at the 300-level.....		3 cr.
Electives.....		9 cr.
Total		18 cr.

All transfer students minoring in philosophy must take a minimum of nine credit hours in philosophy at Northeastern Illinois University.

COURSE OFFERINGS

PHIL-101 Critical Thinking, 3 cr. Introduction to the study of persuasive devices, semantic pitfalls, informal fallacies, rational vs. emotional appeals, and the techniques used in evaluating arguments.

PHIL-102 Introduction to Philosophy, 3 cr. Introduction to the main problems of philosophy, i.e. knowledge, reality, morality, religion, and art.

PHIL-103 Philosophy and Contemporary Issues, 3 cr. Examination of the philosophical basis of selected contemporary issues, controversies, and movements. Consult the Schedule of Classes for specific topics.

PHIL-104 Arguing Philosophically, 3 cr. Specialized instruction and practice in recognizing argument in prose and in articulating, evaluating, and substantiating opinion with argument through oral and written presentation.

PHIL-105 Feminist Philosophy, 3 cr. Analysis of recent work in feminist theory in order to investigate woman's situation and its foundations in culture, perception, and reality.

PHIL-201 Logic I, 3 cr. Introductory course in symbolic logic, dealing with propositional calculus, quantification theory, and the logic of relations and classes.

PHIL-202 Comparative Religion, 3 cr. Comparative study of the main tenets and features of the major religions, principally Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL-211 Philosophy of Religion, 3 cr. Philosophical scrutiny of some of the central themes in religion, i.e. the existence of God, the problem of evil, human freedom and immortality, the nature of faith, and the role of reason in theology.

PHIL-212 Topics in Social Ethics, 3 cr. Readings and discussions of essays dealing with the major moral issues of the contemporary scene, such as freedom and authority, war

and peace, drugs, suicide, and medical ethics. Consult the Schedule of Classes for specific topics.

PHIL-213 Ethics, 3 cr. Introduction to some of the main problems of ethics, including the nature of morality, the meaning of ethical terms, standards for evaluating choices and actions, and the major ideas of important moral philosophers.

PHIL-215 Business Ethics, 3 cr. Philosophical introduction to the ethical content of some of the current problems confronting the business community, such as the social responsibility of business, poverty and equal rights, the ethical implications of ecology, advertising, and consumerism.

PHIL-222 History of Ancient Philosophy, 3 cr. Critical survey of the development of philosophy in the West from the presocratics to Plotinus.

PHIL-231 History of Medieval Philosophy, 3 cr. Critical survey of the development of philosophy in the West from the rise of Christendom to the dawn of the Renaissance.

PHIL-241 History of Modern Philosophy, 3 cr. A critical survey of the development of philosophy in the West in the seventeenth and eighteenth centuries.

PHIL-281 Philosophy and Death, 3 cr. Philosophical study of the main problems in thanatology, such as man's attitudes toward death, Eastern and Western views on the survival of the soul, suicide, and the mind-body problem.

PHIL-291 Philosophical Foundations of Oppression, 3 cr. Analysis of concepts emerging from Anglo-European philosophy which support domination, particularly as they function in colonialism, racism, anti-Semitism, sexism, and heterosexism.

PHIL-303 Logic II, 3 cr. Study of the theory and development of axiomatic systems, including the problems of definability, completeness, and consistency. *Prereq.: PHIL-201 or consent of instructor.*

PHIL-306 Logic III, 3 cr. Systematic inquiry into some of the philosophical problems of logic, such as the nature of propositions, the logical paradoxes, undecidability, types of logic, and the relation of logic to truth, language, and existence. *Prereq.: PHIL-303 or consent of instructor.*

PHIL-313 Ethical Theory, 3 cr. Study of theories about the meaning and justification of moral judgments: good and bad, right and wrong, human rights, justice, punishment, freedom and responsibility, self-interest, the common good, pleasure and happiness, religion and morality, relativism, subjectivism, and skepticism. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-332 Contemporary Philosophy, 3 cr. Critical survey of the salient schools of contemporary philosophy, notably idealism, pragmatism, logical positivism, analytic philosophy, phenomenology, and existentialism. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-333 American Philosophy, 3 cr. Intensive study of the trends prevalent in the modern American philosophical scene, notably pragmatism, idealism, naturalism, positivism, philosophical analysis, and phenomenology. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-334 Nineteenth-Century Philosophy, 3 cr. Intensive study of important problems, topics, or thinkers in nineteenth-century philosophy stressing their relevance to twentieth century concerns. Consult the Schedule of Classes for specific topics. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-335 Analytic Philosophy, 3 cr. Critical survey of the development of analytic philosophy in the twentieth century. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-337 Existentialism, 3 cr. Intensive study of selected works of existentialist thinkers such as Kierkegaard, Nietzsche, Sartre, and Camus. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-341 Metaphysics, 3 cr. Systematic analysis of some of the main problems of metaphysics, such as existence, substance and attribute, change and permanence, essence and accident, universals and particulars, mind and body, identity, individuation, and causality. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-345 Social and Political Philosophy, 3 cr. Systematic investigation of some of the salient issues currently discussed by social and political philosophers, such as the nature and origin of the state, political obligation, justice, human rights, authority, liberty, and evaluation of social and political institutions. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-351 Sexism and the Philosophy of Language, 3 cr. Analytic investigation of sexism in English in order to facilitate discussion of the relation between language, thought, and reality. *Prereq.: PHIL-105 or consent of instructor.*

PHIL-353 Feminism and the Philosophy of Science, 3 cr. Analytic examination of the concept of femininity as found in the biological and social sciences in order to facilitate discussion of the nature of objectivity and scientific investigation. *Prereq.: PHIL-105 or consent of instructor.*

PHIL-361 Topics in Philosophy and Contemporary Issues, 3 cr. Systematic examination of one important contemporary issue, controversy, or problem. Consult the Schedule of Classes for specific topics. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-363 Topics in Philosophy of Religion, 3 cr. Intensive study of an important problem, period, or thinker in the philosophy of religion. Consult the Schedule of Classes for specific topics. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-371 Theory of Knowledge, 3 cr. Systematic inquiry into the nature of knowledge, with a consideration of such topics as ways of knowing, perception, memory, personal identity, and other minds. *Prereq.: one course in philosophy, junior standing, or consent of instructor.*

PHIL-373 Advanced Feminist Philosophy, 3 cr. Analytic investigation of the latest feminist theory in order to study the development of feminism. *Prereq.: PHIL-105 or consent of instructor.*

PHIL-375 Philosophy of Science, 3 cr. Examination of some of the main problems currently discussed by philosophers of science, such as the methodology and foundations of empirical science, the meaning and verification of scientific

ic statements, theories, laws, hypotheses, and explanations.

Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-381 Independent Study in Philosophy, 3 cr. Readings, discussions, and reports on a special topic with faculty supervision. Normally open to majors in their junior or senior year. **Prereq.:** consent of instructor.

PHIL-383 Seminar in Philosophy, 3 cr. Intensive study of one important philosopher, problem, school, or period. Consult the Schedule of Classes for specific topics. **Prereq.:** major in philosophy or consent of instructor.

PHYSICS

Paul J. Dolan, Jr., Ph.D., Associate Professor
Robert L. Gilbert, Ph.D., Professor
Charles Nissim-Sabat, Ph.D., Professor, Chairperson
Surender M. Puri, Ph.D., Professor
Robert M. Stehman, Ph.D., Professor
Mitchel J. Sweig, Ph.D., Professor

The Department of Physics offers programs leading to the Bachelor of Science and Master of Science degrees. An undergraduate minor is also available.

Goals of the department are to:

1. provide students with a solid foundation in classical and modern physics;
2. develop skills which enable students to enter careers in business, teaching, research, and technology;
3. prepare students for further graduate study in physics.

Several departmental courses offered at the 100 level are for non-majors, can be used to fulfill General Education program requirements, and require minimal math preparation. All 300 and 400 level courses in Physics are offered in the evening.

The department places special emphasis on students acquiring as much laboratory experience as possible, together with facility in computer programming. Also, the department offers a series of courses in such areas as electronics and materials science where students are introduced to present-day applications of physics to technology.

Laboratory facilities available to students include analog and digital computers, a wide array of sophisticated electronic, nuclear, and optical instruments, a Mossbauer effect apparatus, a fully equipped cryogenic laboratory, a 14" reflecting telescope, and a machine shop. Students are encouraged to undertake independent projects of their own choosing.

Qualified undergraduate majors and graduate students are eligible to apply for a limited number of tuition waivers, scholarships, and part-time jobs offered through the department. A limited number of graduate teaching assistantships is also available. Contact the chairperson of the department for information and application forms.

Newly admitted graduate students, students-at-large, and all entering freshmen and transfer students who intend to major

in physics must consult the departmental advisor or chairperson before their first registration.

UNDERGRADUATE PROGRAMS

Major in Physics for the Bachelor of Science Degree

Required Core Courses:

*PHYS-206	Physics with Calculus I	3 cr.
*PHYS-207	Physics with Calculus II	3 cr.
PHYS-203	Physics I Laboratory	1 cr.
PHYS-204	Physics II Laboratory	1 cr.
PHYS-215	Physics III	3 cr.
PHYS-308	Introductory Mathematical Physics	3 cr.
PHYS-309	Fortran and Numerical Analysis for Scientists	3 cr.
PHYS-311	Mechanics I	3 cr.
PHYS-321	Electricity and Magnetism I	3 cr.
PHYS-332	Electronics	3 cr.
PHYS-337	Modern Physics Laboratory	2 cr.
PHYS-339	Intermediate Physics Laboratory	2 cr.
Any four of the following:		12 cr.
PHYS-324	Advanced Classical Physics	3 cr.
PHYS-336	Modern Physics I	3 cr.
PHYS-338	Modern Physics II	3 cr.
PHYS-331	Optics or	
PHYS-335	Thermodynamics	3 cr.
A 300-level Physics elective		3 cr.
		Total 42 cr.

*An equivalent course may be substituted.

Required Courses in a Related Field:

CHEM-211	General Chemistry I	5 cr.
CHEM-212	General Chemistry II	4 cr.
MATH-106	Pre-Calculus Mathematics	4 cr.
MATH-107	Calculus I	4 cr.
MATH-202	Calculus II	4 cr.
MATH-203	Calculus III	4 cr.
MATH-301	Ordinary Differential Equations	3 cr.
		Total 28 cr.

The Physics Department recommends that the above courses be taken in the following sequence:

Freshman Year: FALL: MATH-106; SPRING: MATH-107 and if high school preparation is inadequate, PHYS-201.

Sophomore Year: FALL: MATH-202, PHYS-206, PHYS-203; SPRING: MATH-203, PHYS-207, PHYS-204; SUMMER: PHYS-215.

Junior Year: FALL: MATH-301, PHYS-308, PHYS-309, PHYS-332; SPRING: PHYS-311, PHYS-321, Elective; SUMMER: PHYS-324, PHYS-330, Elective.

Senior Year: FALL: PHYS-336, PHYS-337, Elective; SPRING: PHYS-338, and, for students who qualify, PHYS-400.

Students wishing to be certified for teaching physics in secondary schools should consult the Secondary Education section of this catalog.

Minor in Physics (18 cr. hrs.)

Required Courses:

PHYS-201	College Physics I or	
PHYS-206	Physics with Calculus I	3 cr.
PHYS-202	College Physics II or	
PHYS-207	Physics with Calculus II	3 cr.
PHYS-215	Physics III	3 cr.
Nine credits in 300-level physics courses		9 cr.
		Total 18 cr.

GRADUATE PROGRAM

Master of Science in Physics

The master's degree program provides a sound basis in each of the major areas of physics, while retaining sufficient flexibility to provide the student with an opportunity to concentrate on a particular area of interest.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

A bachelor's degree in science, mathematics, or engineering is required. Previous course work must include calculus through partial derivatives and multiple integrals and adequate preparation in physics.

Requirements for the Degree:

Required Courses:

PHYS-324	Advanced Classical Physics	3 cr.
PHYS-336	Modern Physics I	3 cr.
PHYS-338	Modern Physics II	3 cr.
PHYS-400	Introduction to Quantum Mechanics	3 cr.
Electives (including thesis if applicable)		18 cr.
		Total 30 cr.

NOTE: At least 18 of the total 30 credit hours must be at the 400 level.

Thesis Option:

A thesis may be written upon invitation by the department. PHYS-409 Thesis Seminar: Physics carries six credit hours applicable to the program requirements.

Examination:

A final comprehensive examination is required.

COURSE OFFERINGS

PHYS-103 The Universe: Past, Present, and Future, 3 cr. Intended for non-science majors and requiring no

previous formal mathematics or science background. The evolution of the universe: Big Bang creation, expansion of the universe, formation and properties of galaxies and stars, stellar evolution (white dwarfs, neutron stars, black holes), formation and properties of planets as well as the evolution of our understanding of the universe from the perspectives of culture, philosophy, and science.

PHYS-104 Energy, 3 cr. A course for non-science majors requiring no previous formal mathematics or science background. Physics and its application to the problems of energy consumption and production are discussed. Topics include the need for nuclear reactors and the implications thereof, the dumping of nuclear waste at sea and alternatives, better energy sources and energy depletion, the motion of pollutants through the environment, and other related topics.

PHYS-110 Physics in Everyday Life, 3 cr. A laboratory oriented course for the non-science major. Central concepts of physics (the laws of mechanics and electricity, the properties of light, atoms and nuclei) and how they are applied in the modern world (rockets, electric motors, optical instruments, etc.). Lecture 2 hours, lab 2 hours.

PHYS-200 Introduction to College Physics, 3 cr. Basic principles of physics with particular emphasis placed on the interpretation of physical equations and the solution of simple numerical problems. Intended especially for students planning to take PHYS-201. **Prereq.:** MATH-106.

PHYS-201 College Physics I, 3 cr. Kinematics and dynamics of particles and rigid bodies: Newton's laws, energy, momentum and angular momentum. Physics of fluids, vibration and sound. Heat and thermodynamics. **Prereq.:** MATH-106. Concurrent registration in PHYS-203 strongly recommended.

PHYS-202 College Physics II, 3 cr. Electrostatics, Coulomb's law, electric fields, electric potentials, currents, Ohm's law, magnetism, magnetic fields, the forces on or due to moving charges, induction, electromagnetic radiation, wave motion, physical and geometrical optics. **Prereq.:** PHYS-201. Concurrent registration in PHYS-204 strongly recommended.

PHYS-203 Physics I Laboratory, 1 cr. Laboratory course covering the subject matter of Physics I, and meant to be taken concurrently. **Coreq.:** PHYS-201 or PHYS-206.

PHYS-204 Physics II Laboratory, 1 cr. A laboratory course covering the subject matter of Physics II and meant to be taken concurrently. **Coreq.:** PHYS-202 or PHYS-207. **Prereq.:** PHYS-203.

PHYS-206 Physics with Calculus I, 3 cr. This is the first trimester of a three-trimester sequence intended for students majoring in physics, chemistry, or mathematics. Kinematics and dynamics of a particle and systems of particles, momentum, energy, angular momentum, conservation laws, applications to problems involving collisions, oscillatory motion and motion in a gravitational field, rigid body motion, temperature, heat, the laws of thermodynamics, application to thermodynamic engines, and ideal gases are discussed.

Prereq.: MATH-107 and either PHYS-201 or one year of high school physics. Concurrent registration in PHYS-203 strongly recommended.

PHYS-207 Physics with Calculus II, 3 cr. Charges, Coulomb's and Gauss's laws, conductors and dielectrics, Ohm's law, magnetic fields, Ampere's law, motion of charges

in a magnetic field, Faraday's law, inductance, simple L.R.C. circuits, magnetic properties of matter, electromagnetic waves, kinematics of wave motion, reflection, refraction, interference, and diffraction. **Prereq.:** PHYS-206. Concurrent registration in PHYS-204 strongly recommended.

PHYS-215 Physics III, 4 cr. Introduction to the physics of the twentieth century, including applications to related fields such as biology, chemistry, earth science, and engineering. Fundamental concepts of special relativity, quantum mechanics, and statistical physics as applied to atomic, molecular, nuclear and solid state physics. **Prereq.:** PHYS-202 or PHYS-207.

PHYS-301 Independent Study in Physics, 1 cr. Research, laboratory work, study or tutorial in a specific area of physics under faculty supervision. **Prereq.:** consent of department.

PHYS-302 Independent Study in Physics, 2 cr. (See PHYS-301 for description.)

PHYS-303 Independent Study in Physics, 3 cr. (See PHYS-301 for description.)

PHYS-308 Introductory Mathematical Physics, 3 cr. Vector and tensor analysis, matrices, and matrix algebra, ordinary differential equations with constant coefficients; Fourier series, introduction to complex variables. **Prereq.:** PHYS-207 (or PHYS-202) and MATH-202.

PHYS-309 Fortran and Numerical Analysis for Scientists, 3 cr. Introduction to the use of computers in solving scientific problems; Fortran programming is described and applied to several fundamental problems. **Prereq.:** MATH-202, or consent of instructor.

PHYS-311 Mechanics I, 3 cr. Statics of particles and rigid bodies, kinematics and dynamics of particles (including damped and forced harmonic oscillators), work and energy, linear and angular momentum, conservation laws, dynamics of rigid bodies, introduction to special relativity. **Prereq.:** PHYS-308.

PHYS-321 Electricity and Magnetism I, 3 cr. Coulomb's law, electric fields and electrostatic potential, Gauss's law, Poisson's equation, capacitance, dielectric media, current density, simple circuits, magnetic fields, Lorentz force, magnetic media, induction, Ampere's law, inductance, Maxwell's equations. **Prereq.:** PHYS-308.

PHYS-324 Advanced Classical Physics, 3 cr. Introduction to advanced topics in classical physics in preparation for the study of modern physics. Topics include the Lagrangian formalism of classical mechanics and its application to the theories of planetary motion, small oscillations, rigid body mechanics; Maxwell's equations, radiation and propagation of electromagnetic waves, the theory of special relativity. **Prereq.:** PHYS-311 and PHYS-321.

PHYS-330 Intermediate Physics Lab, 3 cr. An introduction to scientific measurement procedures, with special attention paid to the examination of error and uncertainty and to certain widely used experimental techniques and their applications. Techniques used include those in optics, electronics, and atomic, solid state and nuclear physics. Experiments are chosen according to the individual student's needs and interests. This course may be taken up to three times. **Prereq.:** junior standing.

PHYS-331 Optics, 3 cr. The fundamental principles of geometrical and physical optics and their application to the design of modern instruments as well as atomic spectra, properties of photons, and lasers. **Prereq.:** PHYS-202 or PHYS-207, PHYS-204, and MATH-202.

PHYS-332 Electronics, 4 cr. Laboratory and lecture covering both the basic structure of various electronic components, and their use and behavior in circuits. The course begins with linear elements, such as resistors, inductors, and capacitors, and proceeds through various semiconductor devices, diodes, transistors, and operational amplifiers, and culminates with the structure and use of logic circuits. Major emphasis is placed on laboratory work where the properties and interactions of various circuits are investigated. Lecture 2 hours, Lab 4 hours. **Prereq.:** PHYS-204.

PHYS-335 Thermodynamics and Kinetic Theory, 3 cr. Thermodynamic systems; pressure and temperature; ideal gas laws; heat, work and energy; entropy; kinetic theory. **Prereq.:** PHYS-206 and MATH-202 or consent of instructor.

PHYS-336 Modern Physics I, 3 cr. First part of a two trimester sequence dealing with quantum physics. Review of the experimental evidence for the wave properties of light and discussion of atomic spectra and electron spin, elementary wave mechanics, the hydrogen atom, the properties of many electron atoms and the periodic table, and the structure of molecules. **Prereq.:** three 300-level physics courses.

PHYS-337 Modern Physics Lab, 2 cr. A series of experiments chosen according to each student's needs and interests in the fields of optics, electronics, and atomic, nuclear, and solid state physics. **Prereq.:** junior standing.

PHYS-338 Modern Physics II, 3 cr. Second part of a two trimester sequence dealing with quantum physics with primary emphasis on the physics of bulk matter: review of thermodynamics, classical and quantum statistics, the nuclear properties of solids, conductors, semi- and superconductors, ferromagnetism, nuclei, and elementary particles. **Prereq.:** PHYS-336.

PHYS-350 Field Experience in Physics, 3 cr. Practical experience in industrial or government physics laboratories under the joint supervision of the department and the laboratory. There are six hours of field experience required per week. This course may be taken up to three times. **Prereq.:** sixteen credit hours of physics courses and consent of department.

PHYS-361 Materials I: Structural, Mechanical and Thermal Properties, 3 cr. An introductory course on the properties of materials for students in all areas of science and technology. Topics include structural, thermal and mechanical properties of metals, alloys, ceramics, and plastics, and their explanation in terms of molecular and atomic properties. Lecture 2 hours, lab 2 hours. **Prereq.:** PHYS-215 or consent of instructor.

PHYS-362 Materials II: Electronic and Optical Properties, 3 cr. A continuation of Materials I with primary emphasis on the electronic properties of materials and their industrial use. Topics include conductors, semiconductors, superconductors, ferromagnetism and ferroelectricity, optical

and infra-red properties. Lecture 2 hours, lab 2 hours. **Prereq.:** PHYS-215 or consent of instructor.

PHYS-365 Microprocessor Electronics, 4 cr. The course acquaints the students with the basics of microprocessor technology, both from the point of view of understanding the theory of operation, and in learning to program and use these devices to accomplish a given task. The Motorola 6800 is the principal example, and each student has access to a microprocessor trainer for practical lab experiences. Interfacing microprocessors to each other and to the outside world is included, and the course culminates with each student completing a major interfacing project. Lecture 2 hours, Lab 4 hours. **Prereq.:** PHYS-332 or consent of instructor.

PHYS-366 Communication Electronics, 3 cr. The course covers tuned circuits, radio frequency amplifiers, intermediate frequency amplifiers, cavity resonators and U.H.F. amplifiers, modulation, detection, R.F. power amplifiers, transmitters, transmission lines, antennas, television, and special topics in communication electronics, including digital methods and telemetry. Lecture 2 hours, lab 2 hours. **Prereq.:** PHYS-332 or consent of instructor.

PHYS-367 Transducer and Special Purpose Electronics, 4 cr. Lecture and laboratory on the characteristics of devices which convert physical quantities such as heat, light, motion, and sound into electrical signals. This includes both the practical aspects of using such devices and the intrinsic physical properties which makes their use possible. Sensors used include thermistors, thermopiles, microphones, solar cells, and piezoelectric/pyroelectric films. The course culminates with each student doing a major project, which may include computer interfacing to the transducers. Lecture 2 hours, Lab 4 hours. **Prereq.:** PHYS-332 or consent of instructor.

PHYS-369 Instrumentation Electronics, 4 cr. Lecture and laboratory course on the properties and uses of electronic scientific instruments used in making physical measurements, including computer interfacing. The instruments are studied from input transducer to final output. A major emphasis is placed on laboratory work, where actual instrumentation circuits are built and tested. The course culminates with each student building an actual scientific instrument. Lecture 2 hours, Lab 4 hours. **Prereq.:** PHYS-332 or consent of instructor.

PHYS-400 Introduction to Quantum Mechanics, 3 cr. An introduction to the physical and mathematical foundations of quantum mechanics: Observables; wave properties of matter; the Schrodinger equation; the Heisenberg formulation of quantum mechanics; commutation rules, perturbation theory; the Pauli exclusion principle; applications to atomic and molecular physics. **Prereq.:** graduate standing, PHYS-308, and PHYS-336.

PHYS-401 Advanced Experimental Physics, 3 cr. A series of individual experiments or one long-term project (depending upon the student's needs and interests) in the fields of atomic, nuclear, solid state and particle physics. Six hours of laboratory work are required per week. This course may be taken a maximum of three times but may fulfill only three of the eighteen 400-level physics credit hours required

for the Master of Science. **Prereq.:** graduate standing and consent of instructor.

PHYS-402 Atomic Physics, 3 cr. One electron atoms, Bohr atom, Schrodinger's equation, sketch of relativistic theory, Zeeman and Stark effects, the theory of radiation, central field approximations, current applications. **Prereq.:** graduate standing and PHYS-400.

PHYS-403 Solid State Physics, 3 cr. Crystal structure, crystal bonding, thermal properties of solids, dielectric properties, free electron model of metals, band theory of solids, magnetism, superconductivity, current applications. **Prereq.:** graduate standing and PHYS-400.

PHYS-404 Advanced Electronics for Scientists, 3 cr. Description of and operating techniques for electronic instrumentation used in the measurement and analysis of scientific data: feedback control (servo) systems, operational amplifiers, analog computation, digital circuits and systems including microprocessors. **Prereq.:** graduate standing, PHYS-332, or consent of instructor.

PHYS-405 Elementary Particles, 3 cr. Theoretical and experimental advances in elementary particle physics from the prediction and discovery of the pi meson to the advent of gauge theories with special emphasis placed on the symmetries of the strong and weak interactions. **Prereq.:** graduate standing and PHYS-400.

PHYS-406 Statistical Mechanics, 3 cr. Transport theory, kinetic theory of gases, ensembles, Fermi-Dirac Statistics, Bose-Einstein statistics; applications to superfluids, electron gases in metals and semi-conductors, and ferromagnetism. **Prereq.:** graduate standing, PHYS-312, PHYS-335, and PHYS-336.

PHYS-407 Relativity and Gravitation, 3 cr. Review of the historical development of special relativity; relativistic kinematics and dynamics, tensor calculus in Euclidian and Riemannian geometry; the general theory of relativity and the weak field approximations; experimental verifications; introduction to cosmology. **Prereq.:** graduate standing, PHYS-312, and PHYS-323.

PHYS-408 Independent Study in Physics, 3 cr. Research in a particular area of physics under faculty supervision. **Prereq.:** graduate standing and consent of department.

PHYS-409 Thesis Seminar: Physics, 6 cr. Guidance for students conducting research and writing a thesis to fulfill the requirements for the master of science degree in physics. **Prereq.:** acceptance to master's degree candidacy in physics and invitation by the department to write a research thesis.

PHYS-410 Electrodynamics, 3 cr. Dynamics of fields, primarily the electromagnetic field, are discussed. Topics include Maxwell's equations (with particular reference to radiation from moving charges), momentum and energy flow in the electromagnetic field, radiation damping, covariant formulation of electrodynamics, scalar, vector, and tensor fields. **Prereq.:** graduate standing and PHYS-323.

PHYS-411 Classical Dynamics, 3 cr. The advanced techniques of classical mechanics, including variational principles, Lagrange's and Hamilton's equations, and canonical transformations. **Prereq.:** graduate standing and PHYS-312.

PHYS-412 Nuclear Physics, 3 cr. Nuclear forces; structure of nuclei; radiation; reactions and scattering; neutrons

and fission; accelerators and detectors; high energy phenomena. *Prereq.*: graduate standing, PHYS-336 and PHYS-400.

PHYS-413 Topics in Theoretical Physics, 3 cr. Various advanced topics in Physics. Different topics will be considered each time the course is offered. Subjects considered in the past include General Relativity, Quantum Electronics, Astrophysics, and Atomic and Molecular structure. Credit for this course may be received up to three times for the Master of Science in Physics. Consult the Schedule of Classes for specific topics. *Prereq.*: graduate standing and consent of instructor.

POLITICAL SCIENCE

Ellen Cannon, Ph.D., Associate Professor
Shirley Castelnovo, Ph.D., Professor
Asad Husain, Ph.D., Professor
John J. Murphy, M.A., Professor
Charles Pastors, Ph.D., Professor
Donald E. Schulz, Ph.D., Assistant Professor
Zahid Shariff, D.P.A., Professor
Valerie Simms, Ph.D., Professor, Chairperson
Edward Uliassi, Ph.D., Professor
Kusol Varophas, Ph.D., Professor
Shu-Shin Wang, Ph.D., Associate Professor

Political Science is central to understanding all basic issues of society; therefore, an understanding of political life is indispensable for any well-educated person. The department currently offers an undergraduate major, a minor in political science, a minor in public administration, and a graduate program leading to the Master of Arts degree.

Areas of political science in which courses are offered include American Politics and Public Affairs; International Relations and Comparative Politics; and Political Theory. Within each area, major themes are explored (e.g., public policy and administration, political values and change, elite-mass relationships, and political parties and groups.)

Students interested in majoring in political science are urged to register as a major at the departmental office early, to meet with their advisors regularly, to check the current Schedule of Classes each term, and to become well acquainted with the requirements for political science majors. Information is available in the departmental office.

The Constitution examination required for graduation may be satisfied by taking the following course:

PSCI-AMER-216 American National Government...3 cr.

This course is also recommended to fulfill the teachers' certification requirement in American government.

UNDERGRADUATE PROGRAMS

Major in Political Science for the Bachelor of Arts Degree

Students majoring in political science must take at least 33 credit hours in political science.

Required Courses:

Two introductory courses selected from:.....6 cr.
PSCI-IR-201 Introduction to World Politics
PSCI-COMP-211 Comparative Political Systems
PSCI-THRY-213 Concepts of Political Science
PSCI-AMER-216 American National Government
(These introductory courses are not open to majors in their senior year.)

PSCI-210 Introduction to Political Science3 cr.
(PSCI-210 must be among the first four political science courses taken.)

Eight 300-level courses24 cr.
to be distributed among:
5 courses in one area of emphasis*
2 courses in a second area
1 course in a third area

Total 33 cr.

*The broad areas of emphasis recognized by the department are American Politics and Public Affairs; International and Comparative Politics; and Political Theory.

Minor in Political Science (18 cr. hrs.)

A minor in political science may be structured to complement a student's major in another department or to develop an area of interest. An assigned advisor will counsel a student in choosing six appropriate courses.

The following two courses are required: One course selected from PSCI-IR-201, PSCI-THRY-213, PSCI-COMP-211 or PSCI-AMER-216; and the general survey of the discipline, PSCI-210. At least three courses should be taken at the 300-level.

Minor in Public Administration (18 cr. hrs.)

This minor will be of interest to students who would like to broaden the career opportunities available to them, students interested in public affairs and administration and students in non-traditional programs, such as the Board of Governors program, who wish to focus on governmental processes.

Required Courses:

PSCI-AMER-216 American National Government.....3 cr.
PSCI-PA-332 Public Administration.....3 cr.

At least two courses from the following:.....6 cr.
PSCI-AMER-311 Public Policy.....3 cr.
PSCI-PA-333 Public Organization Theory.....3 cr.
PSCI-PA-367 Government Budgeting.....3 cr.
PSCI-PA-375 Public Personnel Administration.....3 cr.

Two 300-level courses relevant to Public Administration chosen with the aid of a departmental advisor, including, if desired, one or two additional courses from the list of four above.....6 cr.

Total 18 cr.

Courses in which a student receives a grade of "D" may not be counted toward minors in the department.

GRADUATE PROGRAM

Master of Arts in Political Science

Students have two options to choose from to fulfill the master's degree program requirements:

- 1. Thirty credit hours of course work, a thesis for six credit hours, and an oral examination, or
- 2. Thirty-six credit hours of course work, a written comprehensive examination, and an oral examination.

A student interested in the thirty credit thesis option must secure approval of the department. Only students who have demonstrated high proficiency in various aspects of graduate studies (writing, discussion, analysis, creativity, etc.) will be permitted to write a thesis.

Requirements:

Students must fulfill the requirements for admission to the Graduate College.

Students must select one area of emphasis from the following:

American Politics and Public Affairs
International and Comparative Politics
Political Theory

Students are required to take:

- 1. PSCI-420 Classics of Political Science, preferably as a first course.
- 2. PSCI-421 Research Methods in Political Science, if possible, before graduate seminar courses.
- 3. Five courses in the area of emphasis, including a 400-level seminar or a thesis seminar.
- 4. Three courses selected from a second area.
- 5. Two elective courses from any area of emphasis.

Students may take up to six (6) credit hours of cognate courses from other departments with prior approval of the graduate coordinator. Cognate courses taken without the graduate coordinator's prior approval may not be counted as part of the requirements for the degree.

Most of the courses taken to complete the master's program must be at the 400-level.

For further details concerning these requirements, contact the graduate coordinator of the department or the department chairperson.

COURSE OFFERINGS

PSCI-101 Introduction to Politics, 3 cr. A general introduction to politics, focusing on current political issues and

events at the city, state, national, and international levels. Basic concepts and methods are introduced.

PSCI-210 Introduction to Political Science, 3 cr. An introduction to the discipline through an examination of the concepts and skills utilized in the contemporary study of politics. The course provides an overview of political science, including its various sub-fields, and a framework for further study. This course does not satisfy General Education requirements.

PSCI-317 Independent Study in Political Science, 3 cr. Intensive investigation of a special area of political science or a contemporary political issue. *Prereq.*: consent of instructor.

PSCI-327 Independent Study in Political Science, 2 cr. (See PSCI-317 for description.)

PSCI-337 Independent Study in Political Science, 1 cr. (See PSCI-317 for description.)

PSCI-373 Topics in Political Science, 3 cr. Exploration at an advanced level of current issues and special concerns in political science. Consult the schedule of classes for specific topics.

PSCI-385 Field Experience, 3 cr. Placement in a government agency, political office or related institution for 8 hours per week. Opportunity for testing classroom concepts and theories, career exploration and the development of problem solving, research and social skills. Meetings arranged. *Prereq.*: six hours in the Behavioral/Social Sciences and consent of instructor.

PSCI-386 Internship I, 6 cr. (See description for PSCI-385. Hours in placement increased to 16 hours per week.)

PSCI-387 Internship II, 6 cr. (See description for PSCI-385. Hours in placement increased to 16 hours per week.)

PSCI-417 Readings in Current Political Issues, 3 cr. Intensive reading on a current issue in political science. In consultation with the instructor, students select topics within the general issue, prepare a reading program on the topic, analyze the problems and methods involved, and present a written and/or oral discussion of the major books and articles dealing with the chosen topic. Consult the Schedule of Classes for specific topics. *Prereq.*: graduate standing.

PSCI-420 Classics of Political Science, 3 cr. An examination of selected classics of the discipline of political science, with a special emphasis on major contributions of the modern era. This course provides students with an opportunity for close analysis of complex works in political science. *Prereq.*: graduate standing.

PSCI-421 Research Methods in Political Science, 3 cr. Introduction to the various techniques in political science with emphasis on developing skills necessary for graduate work in the department. Areas of concentration: development of research designs, identification of appropriate data sources, discussion of alternative methodologies, data analysis techniques. *Prereq.*: graduate standing.

PSCI-431 Thesis Seminar—Political Science, 6 cr. Guided research and preparation of the thesis required for the Master of Arts degree in Political Science. *Prereq.*: master's degree candidacy in political science.

- PSCI-432 Independent Study in Political Science, 3 cr.** Research and investigation into special topics and preparation for a research paper(s) under individual faculty guidance. *Prereq.:* graduate standing.
- PSCI-433 Independent Study in Political Science, 2 cr.** (See PSCI-432 for description.)
- PSCI-434 Independent Study in Political Science, 1 cr.** (See PSCI-432 for description.)

American Politics and Public Affairs

- PSCI-AMER-216 American National Government, 3 cr.** Description and analysis of national political institutions and processes. Current issues and problems of American government.
- PSCI-AMER-301 Congress and the Legislative Branch, 3 cr.** Introduction to the U.S. Congress as a political and legislative body; includes analysis of the committee system, rules, and differences between House and Senate; examines problems of representation and executive-legislative relations. *Prereq.:* PSCI-AMER-216 or consent of instructor.
- PSCI-AMER-303 Public Opinion, Mass Media, and American Politics, 3 cr.** The role of public opinion in American politics, techniques of polling and survey research, the impact of mass media on opinion and on candidate preferences; introduces concepts of political culture and socialization. *Prereq.:* PSCI-AMER-216 or consent of instructor.
- PSCI-AMER-304 The American Judiciary and the Judicial Process, 3 cr.** An analysis of the judicial policy-making process at all levels of the American judiciary with special emphasis on the Supreme Court's role in constitutional development, separation of powers, and the historical and political context of constitutional law doctrines. Critical cases are examined. *Prereq.:* PSCI-AMER-216 or consent of instructor.
- PSCI-AMER-305 Constitutional Law, 3 cr.** The role of the Supreme Court and its impact on the constitutional development of the due process clause, civil liberties, First Amendment freedoms, and the equal protection of the laws are traced with particular emphasis on the assessment of the role of the Supreme Court vis-a-vis the states and the national government in protecting and restricting civil liberties. *Prereq.:* PSCI-AMER-216 or consent of instructor.
- PSCI-AMER-307 American Ideologies, 3 cr.** Exploration of various ideologies that attempt to explain the nature of American society and politics; a discussion of belief systems and value orientations; consideration of diversity and change in a system of fundamental stability; analysis of variants of left and right ideologies. *Prereq.:* PSCI-AMER-216 or consent of instructor.
- PSCI-AMER-309 Pressure Groups: Power, Participation, and Public Policy, 3 cr.** Examination of the role of interest groups in political systems, with emphasis on groups in American politics—their membership, organization, activities, goals, and impact on American public policy with special attention on the role of groups as representative agents and their functioning as facilitators or resisters with regard to social change. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-311 Public Policy, 3 cr. Introduction to the analysis of public policy, including the policy-making institutions and processes; normative and empirical models of policy-making, and case studies of specific public policies.

Prereq.: PSCI-AMER-216 or consent of instructor.

PSCI-AMER-315 Government and Economy, 3 cr. Exploration of the role and purpose of government and market in the American economy; discussion of contemporary issues (e.g., income distribution or government regulation); international comparisons.

PSCI-AMER-321 Pro-Seminar in the American Political Process, 3 cr. Investigation of a particular feature of the American political process, an important development in the study of American politics, or the politics of a specific policy area, such as the presidential election process, the development of voting behavior studies, or the politics of national health care. Consult the Schedule of Classes for specific topics. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-330 Political Parties and the Political Party System, 3 cr. The role of political party systems in American society and their impact on the electoral process, representation, and social change. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-331 American Presidency and the Executive Branch, 3 cr. The role of the President and the executive branch in the American governmental system. Contemporary problems of the Presidency and the bureaucracy. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-333 State Government and Politics, 3 cr. Examination of political institutions at the state level: governor, legislature, judiciary, constitution, parties, and administration. Analysis of state politics within and outside the institutional framework. Discussion of major problems and functions of state governments today. Emphasis on Illinois government and politics. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-381 The Politics of Law, 3 cr. Consideration of various definitions of law, the impact of law on the behavior of various actors; the political, social, and economic forces which mold law; the influence of the legal system on the various actors within it; and theoretical efforts to explain the relationships of law and society, with emphasis on the trial courts, the organization of the bar, the origin of litigation, and the political consequences of lower court involvement in social conflicts. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-388 Electoral Politics, 3 cr. A review of major developments in electoral politics (including political parties and electoral law) and voting behavior in recent years, and an analysis of current elections. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-AMER-401 Seminar in American Policy-Making Process, 3 cr. Analysis of legislative, executive, administrative, and judicial policy-making processes at the national government level with emphasis on current research, case studies in policy-making, and presentation of seminar papers. *Prereq.:* master's degree candidacy in political science and PSCI-421.

PSCI-AMER-402 Seminar in Political Behavior, 3 cr. Sociological and psychological perspectives in political science; how political attitudes and preferences are formed; comparative political cultures; social and psychological determinants of political participation and political decision-making; American voting behavior; discussion of current research in these areas; writing and presentation of seminar papers. *Prereq.:* master's degree candidacy in political science and PSCI-421.

PSCI-AMER-422 American Political Elites, 3 cr. The nature and impact of elites in the American political system. Readings and discussion will include Plato, Marx, Michels, and various contemporary treatments of the nature of American society. Special topics will be covered on the basis of students' particular interests. *Prereq.:* graduate standing and one course in American politics or consent of instructor.

PSCI-PA-325 Topics in Public Administration, 3 cr. Exploration at an advanced level of current issues and special concerns in public administration. *Prereq.:* PSCI-PA-332 or consent of instructor.

PSCI-PA-332 Public Administration, 3 cr. Introduction to the role of public bureaucracies in the political system. A general overview of major concepts, processes, and problem areas in the field of public administration. Intended for undergraduate students; graduate students seeking a general overview of the field should take PSCI-PA-415. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-PA-333 Public Organization Theory, 3 cr. Review of theories concerning public bureaucracies, their internal functioning and societal roles; analysis of the organizational setting of work and its implications; organizational effectiveness, decision-making, leadership and policy formulation, and change in public organizations. *Prereq.:* PSCI-PA-332 or consent of instructor.

PSCI-PA-367 Government Budgeting, 3 cr. Fiscal policy and budget process; historically changing functions of budgeting — from emphasis on control to managerial effectiveness; reassertion of Congressional authority in 1974 and the new budget cycle; zero-based budgeting; impoundment, transfer payments, and grant-in-aid. *Prereq.:* PSCI-PA-332 or consent of instructor.

PSCI-PA-375 Public Personnel Administration, 3 cr. Organization and administration of the personnel function in public bureaucracies; relations of personnel management to operating departments and agencies; the scope of public personnel services; appraisal of policies and practices in selected areas of personnel management, such as selection and training, human relations, and motivation. *Prereq.:* PSCI-PA-332 or consent of instructor.

PSCI-PA-407 Comparative Public Administration, 3 cr. Study of the significance of public administration in a comparative setting with particular emphasis on the Third World; cultural impact on bureaucratic behavior; international and United States technical assistance in public administration; bureaucracy and development; comparative public policy; Third World perspectives and the recent critiques of administratively generated and First World inspired development. *Prereq.:* graduate standing and PSCI-PA-415 or PSCI-PA-332 or consent of instructor.

PSCI-PA-408 Seminar in Public Policy Analysis, 3 cr. Study of governmental policy and program implementation from the perspective of policy choice, decision-making, and evaluation. Topics include criteria for evaluation of policy, techniques of analysis such as forecasting and scenario development, impact analysis, client satisfaction, and inequalities of result. *Prereq.:* graduate standing, PSCI-PA-332 or PSCI-PA-415, and PSCI-421.

PSCI-PA-415 History and Literature of Public Administration, 3 cr. A review of major historical periods in public administration theory and practice and consideration of present tendencies and possible future developments. Consideration of standard summaries of the development of the discipline and primary, classical sources as well as key theorists and concepts of the discipline. *Prereq.:* graduate standing.

PSCI-PA-419 Public Bureaucracies, 3 cr. Review of classic and contemporary literature on bureaucracy; analysis of the concept of bureaucracy; examination of selected public bureaucracies; strengths and limitations of the bureaucratic form of work organization; proposed alternative forms of work organization in the public sector; problems of accountability and public control. *Prereq.:* graduate standing and PSCI-PA-415 or PSCI-PA-332 and consent of instructor.

PSCI-URB-318 Urban Government Administration, 3 cr. Introductory survey of local governmental administration; powers of municipal corporations, special districts and other jurisdictions; taxation, revenue and budgeting, common administrative structures, and institutionalized forms of urban leadership and control. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-URB-334 Urban Politics, 3 cr. Types of urban government and politics; ability of the governmental institutions to meet the demands and respond to the needs of urban areas; community power and control; citizen participation and decentralization of governmental services. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-URB-349 Intergovernmental Relations, 3 cr. Impact of federalism on policy-making and administration in the American system; focuses on the interaction between federal government and states, metropolitan areas, and cities in the development and implementation of public policy. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-URB-350 Chicago Politics, 3 cr. The structure of the government of the City of Chicago and its associated politics; the development of the Daley machine and its aftermath with particular focus on the impact of race on contemporary political behavior; including analysis of voting patterns and blocs within the City Council. *Prereq.:* PSCI-AMER-216 or consent of instructor.

PSCI-URB-357 Laboratory in Urban Politics, 3 cr. First-hand observation of urban governmental organization, political parties, and politically active citizen groups; written and oral reports and class discussion of field observations. *Prereq.:* three credit hours in urban politics or consent of instructor.

PSCI-URB-405 Seminar in Urban Politics, 3 cr. Analysis of the politics of metropolitan areas, with emphasis on the mobilization of resources for urban problem-solving, and the political forces that impede the solution of such problems.

Students will write and present research papers on urban politics in the Chicago metropolitan area. **Prereq.:** graduate standing and PSCI-421.

International Relations and Comparative Politics

PSCI-ASIA-324 Government and Politics of China, 3 cr. The structure and activities of the Chinese Communist party and state communist outlook; ideologies and significant internal and foreign problems. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-341 Governments in Asia, 3 cr. Comparison of Asian political systems, including China, Japan, India, Pakistan, and Southeast Asian countries. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-342 International Relations in Asia, 3 cr. The foreign policies of various Asian nations with special attention to the relations among these nations as well as their relations with other areas of the world. **Prereq.:** PSCI-COMP-211.

PSCI-ASIA-343 Pro-Seminar in Asian Politics, 3 cr. Concentration on significant contemporary events in the politics of Asia and the implications of those events for future developments. Consult the Schedule of Classes for specific topics. **Prereq.:** PSCI-ASIA-211 or consent of instructor.

PSCI-ASIA-348 Government and Politics in South Asia, 3 cr. Analysis of the constitution, governmental structure, and political process of India, Pakistan, the Himalayan states, and Sri Lanka. Discussion of current domestic and foreign policies. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-368 The Politics of Islam, 3 cr. Discussion of the religion of Islam and the Islamic political institutions; influence of Islamic political thought and religion on political systems currently operating in major Muslim countries. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-377 Government and Politics of Japan, 3 cr. The modern Japanese political system; the relationship between the Japanese people and their institutions, including the interrelationships between the traditional and the modern with emphasis on the structures and processes of Japanese government and politics since World War II. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-403 Seminar in Contemporary Political Problems of East Asia, 3 cr. Analysis of the major political systems of the region with emphasis on such topics as nationalism, westernization, and communism; discussion and presentation of seminar papers. **Prereq.:** master's degree candidacy in political science and PSCI-421 or consent of instructor.

PSCI-ASIA-411 Seminar in South Asian Politics, 3 cr. Examination of South Asian politics. Review of recent approaches to the study of this field. Students are exposed to a substantial portion of South Asian political literature; discussion, oral and written presentations. **Prereq.:** master's degree candidacy in political science and PSCI-421 or consent of instructor.

PSCI-COMP-211 Comparative Political Systems, 3 cr. Comparison of several diverse political systems to illustrate the range of political life and to provide a broad perspective from which to view the American political system.

PSCI-COMP-312 Modern European Governments, 3 cr. Comparative study of the politics and governments of several major European nations. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-322 Politics and Governments of South America, 3 cr. Examination of the various political systems on the continent of South America with comparisons of social and political institutions of the various countries. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-323 Government in New Nations, 3 cr. Comparative analysis of political systems in the developing nations; attention is centered on nations of Southeast Asia, Africa, and Latin America. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-338 Politics of Sub-Saharan Africa, 3 cr. Examination and comparison of the politics of selected African states; particular emphasis on traditional heritage, colonial background, ideological setting, political parties, role of the military, governmental structure, and problems of nation-building. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-340 Pro-Seminar in Comparative Politics, 3 cr. Examination of a special topic in comparative politics. Consult the Schedule of Classes for specific topics. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-344 Politics of the Middle East, 3 cr. The impact of the physical environment, the economic conditions, and the historical heritage on the political structures presently operating in the region; analysis of the region in its world context. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-351 The Soviet Union: Government and Politics, 3 cr. Structure and operation of the Soviet Communist Party and state, focusing on local politics, economic activity, communications systems, and foreign relations. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-354 Political Change in Africa, 3 cr. Examination of concepts and processes used to analyze political change with particular emphasis on traditional societies and the processes of transformation, nation-building, role of the military, and ideologies. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-355 Politics and Government of Mexico, Central America, and the Caribbean, 3 cr. The political systems in Mexico, Central America, and the Caribbean; comparison of the social, economic, and political conditions of each; the strategic importance of this region to the United States. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-360 Canadian Government and Politics, 3 cr. The Canadian political system with analysis of the constitutional development, the structure of government, political parties and pressure groups, problems of regionalism and nationality, questions of foreign policy and relationship with the United States. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-365 Soviet Union in International Politics, 3 cr. Analysis of the Soviet Union as a "super power" and her relations with the United States. Examination of Soviet foreign policy with particular emphasis on relations with communist and noncommunist countries; recent political

events; developments in the field of weaponry, communications, regional alliances, and the Soviet role in the U.N.; prospects of world peace. **Prereq.:** PSCI-COMP-211 and PSCI-COMP-351 or consent of instructor.

PSCI-COMP-390 Gender and Politics, 3 cr. A study of the relationship of gender and gender roles to political attitudes, beliefs and behavior. The nature of political socialization is considered as well as political and economic structures pertinent to gender distinctions. The approach is comparative. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-COMP-413 Seminar in Comparative Politics, 3 cr. Analysis of selected problems in comparative politics, such as the nature of political development, the relation of capitalism to various forms of government, the future of advanced industrial societies; presentation and discussion of seminar papers. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing and PSCI-421.

PSCI-IR-201 Introduction to World Politics, 3 cr. General introduction to world politics with emphasis on current issues and events of importance at the international or global level. Basic concepts and methods of political analysis are introduced.

PSCI-IR-302 United States Foreign Policy Since World War II, 3 cr. Description and analysis of the important changes in traditional American foreign policy that have occurred since World War II; the international responsibilities that the United States has shouldered as a world power; the political, economic, and social factors that are conditioning and limiting American foreign policy today. **Prereq.:** PSCI-AMER-216 and three credit hours of American history or consent of instructor.

PSCI-IR-313 Contemporary International Relations, 3 cr. Basic principles and problems; emphasis on contemporary issues in international political life. **Prereq.:** PSCI-AMER-216 or PSCI-COMP-211 or consent of instructor.

PSCI-IR-316 War and Peace, 3 cr. War as a social institution; causes of war and the conditions of peace; prospects and proposals for a peaceful world order. **Prereq.:** PSCI-AMER-216 or PSCI-COMP-211 or consent of instructor.

PSCI-IR-319 International Law, 3 cr. Evolution of international law from theological statements to modern jurisprudence; ramifications of the state as the single most important international person and its multifaceted activities; case briefing as a method of studying international law. **Prereq.:** PSCI-IR-364 or consent of instructor.

PSCI-IR-320 United States and the World Economy, 3 cr. A study of the nature and structure of the world economy and the role played by the U.S. in the post-World War II economy. Topics such as the Bretton Woods System, the Gold Window and flexible exchange rates and their political, social, economic and strategic dimensions.

PSCI-IR-328 International Terrorism, 3 cr. Investigation of terrorism, beginning with the problem of definition. Origins and evolution of terrorism as well as motivations and inspirations of those who have embraced terrorism. A selection of terrorist organizations will be studied.

PSCI-IR-359 Pro-Seminar in International Relations, 3 cr. Study of specific topics or significant developments in international relations. Recent topics include Multinational

Corporations, Arms Control and Disarmament, and Politics of World Minorities. Consult the Schedule of Classes for specific topics. **Prereq.:** PSCI-IR-313 or PSCI-IR-364.

PSCI-IR-364 Principles of International Relations, 3 cr. Content and method of studying international relations; classical and behavioral approaches. **Prereq.:** PSCI-AMER-216 or PSCI-COMP-211 or consent of instructor.

PSCI-IR-366 International Relations of the Middle East, 3 cr. Struggles for power and peace in this strategic region of the world; nature and frequency of interactions between the nations of the region and between these nations and the great powers. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-IR-378 International Organizations: Theory and Practice, 3 cr. Evolution of existing theories in the area of worldwide and region-wide cooperation among sovereign states. Survey of writings of recognized scholars, as well as commentaries. **Prereq.:** PSCI-IR-313 or PSCI-IR-364 or consent of instructor.

PSCI-IR-406 Seminar in International Relations, 3 cr. Analysis of selected problems in international relations, such as causes of international conflict, international diplomacy, conflict resolution, and problems in international law; presentation and discussion of seminar papers. Consult the Schedule of Classes for specific topics. **Prereq.:** master's degree candidacy in political science and PSCI-421.

PSCI-IR-407. Political Integration in Western Europe, 3 cr. Focus on post-World War II political integration in Europe; examination of various European international and supranational organizations, with emphasis on the dynamics of political integration in the European Community. **Prereq.:** master's degree candidacy in political science.

PSCI-IR-412 Seminar in the Behavioral Aspects of International Relations, 3 cr. Research, seminar papers, and discussion on the socio-psychological approaches to the study of international relations; topics include the role of nationalism in international conflict, decision-making in international relations, national and international image formation, and the socio-psychological determinants of foreign policies. **Prereq.:** master's degree candidacy in political science and PSCI-421.

Political Theory

PSCI-THRY-213 Concepts of Political Science, 3 cr. Analysis of a number of crucial political concepts, such as equality, justice, political obligation, representation, rights, and law.

PSCI-THRY-306 Contemporary Political Philosophy, 3 cr. Problems of contemporary political philosophy are examined through selected writings of twentieth century political philosophers with particular emphasis on the breakdown of authority, political obligation, the decline of political participation, technology versus human values, revolution, the use and meaning of violence, and the concept of public interest. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-320 Early American Political Thought, 3 cr. Topics including the American revolution, the writing of the constitution, and the crisis of the Republic will be examined through selected writings of the following theorists and activists: Winthrop, Adams, Paine, Jefferson, Hamilton, Madison,

Calhoun, Stanton, Thoreau, Douglass, Grimke, and Lincoln.

Prereq.: PSCI-THRY-213 or consent of instructor.

PSCI-THRY-326 Selected Political Theorists, 3 cr. An in-depth examination of a selected political theorist's works as well as the critical literature. A different theorist will be examined each semester. Consult the Schedule of Classes for specific topics. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-335 Classical Political Theory, 3 cr. Analysis of the concept of a political community in terms of obligations, rights, the public interest, the just state, and the just individual. Selected writings of Plato, Aristotle, Sophocles, Aristophanes, Xenophon, and others. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-336 Modern Political Theory, 3 cr. Analysis of the tensions between the individual and society. Concepts of society, natural rights, political obligation, consent, the rule of law, social contract, and revolution examined through selected writings of Machiavelli, Hobbes, Locke, Rousseau, Burke, Mills, Marx, and Pateman. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-339 Contemporary Political Analysis, 3 cr. Analysis of behavioralism, decision-making theories, quantitative approaches to politics, structural-functionalism, systems theory, game theory, political development theory, and interest group theory. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-352 African Political Thought, 3 cr. African political thought is examined through selected writings of important African leaders and writers dealing with political development in the new states of Africa with particular focus on the problems of African identity (African values versus westernization), African socialism, Pan-Africanism, and the one party state. **Prereq.:** PSCI-THRY-213 or PSCI-COMP-211 or consent of instructor.

PSCI-THRY-363 Pro-Seminar in Political Theory, 3 cr. In-depth reading and discussion of concepts and modes of analysis relevant to political theory. Consult the Schedule of Classes for topics. **Prereq.:** PSCI-THRY-213 or consent of instructor.

PSCI-THRY-379 Law and Social Change, 3 cr. An assessment of the possibilities and limitations of law as an instrument of social change through an examination of the status of minorities and women, the social control of corporate behavior, and the politics of rights. **Prereq.:** PSCI-AMER-216 or consent of instructor.

PSCI-THRY-416 Seminar in Selected Problems in Political Theory, 3 cr. An examination of crucial problems in political theory; the basis for moral values, political obligation, the nature of state, the concept of human nature, theories of representation, political change, and natural rights.

Prereq.: master's degree candidacy in political science, PSCI-421, and six credit hours in the appropriate area of political science.

PSYCHOLOGY

Bernard M. Aronov, Ph.D., Professor
Saba Ayman-Nolley, Ph.D., Assistant Professor
Margaret E. Condon, Ph.D., Professor, Chairperson

Hubert Dolezal, Ph.D., Professor
Arnold W. Gordon, M.S., Assistant Professor
Daniel Kuzuhara, M.A., Assistant Professor
Frank M. Loos, Ph.D., Professor
John W. Mann, Ph.D., Professor
Robert L. McFarland, Ph.D., Professor
William J. Pizzi, Ph.D., Professor
Dorothe Rigby, Ph.D., Associate Professor
Richard J. Robertson, Ph.D., Professor
Vin Rosenthal, Ph.D., Professor
Therese Schuepfer, Ph.D., Associate Professor

Psychology is the social science which deals with human behavior in all its forms: psychological, cognitive, emotional, individual, and group. Its methods range from those similar to the ones used in the humanities to those used in the natural sciences. It offers students a perspective which is not only a career in itself but also a useful adjunct to any discipline.

The Department of Psychology offers an undergraduate program that leads to a Bachelor of Arts degree in Psychology and a graduate program which leads to a Master of Arts in Gerontology. In both of these programs, the department prepares students for careers in those areas that make particular use of a knowledge of human behavior and development. These include human resource and personnel positions in industry, direct service work positions in the social services, and research associate positions in academic and industrial settings. Students are also prepared for pursuing further education in any of the major areas of psychology.

The department faculty members represent a number of theoretical approaches as well as a wide range of content areas. This enhances the student's opportunity to become acquainted with the full scope of this broad and complex subject. Because of the need to create a combination of courses consistent with their career goals, students are urged to form a continuing relationship with a faculty advisor in the department early in their major.

The interdisciplinary nature of psychology requires familiarity with other fields. Students intending to pursue graduate studies should have a strong background in mathematics and the natural sciences. All psychology majors will benefit from course work in philosophy, physiology, literature, history, the social sciences, and computer science.

Students should seriously consider participating in the optional field experience program. For details, see the section on Field Experience. Additional information is available from the department program advisor.

Minors in psychology and in gerontology are offered.

UNDERGRADUATE PROGRAMS

Major in Psychology for the Bachelor of Arts Degree

psychology courses used as electives must be numbered at the 200-level or above. Students who transfer in a 3 credit hour course in general psychology may complete the major with 30 credit hours.

Required Courses:

PSYC-201 General Psychology4 cr.
PSYC-317 Introduction to Statistical Methods
In Psychology*3 cr.
PSYC-318 Introduction to Experimental Psychology* 3 cr.

Select one of the following:3 cr.
PSYC-306 Operant Conditioning Lab3 cr.

PSYC-325A Laboratory, Research Methods:
Child Development3 cr.
PSYC-325B Laboratory, Research Methods:
Personality Development3 cr.

PSYC-354 Physiological Psychology Lab3 cr.
PSYC-360 Laboratory, Research Methods:
General3 cr.

PSYC-361 Laboratory Research Methods:
Clinical/Social3 cr.

PSYC-362 Laboratory Research Methods:
Perception and Cognition3 cr.

PSYC-363 Laboratory Research Methods:
Tests and Measurements3 cr.

Select three of the following:9 cr.
PSYC-215 Introduction to Humanistic Psychology3 cr.

PSYC-301 Developmental Psychology3 cr.
PSYC-311 Psychology of Personality3 cr.
PSYC-312 Abnormal Psychology3 cr.

PSYC-313 Social Psychology or
PSYC-314 Industrial Psychology3 cr.

PSYC-316 Physiological Psychology or
PSYC-382 Physiological Bases of
Mental Disorders3 cr.

PSYC-327 Psychology of Learning3 cr.
PSYC-331 Psychological Tests and
Measurements3 cr.

PSYC-335 History of Psychology3 cr.

Three electives in psychology9 cr.
Total 31 cr.

* These courses should be completed before the beginning of a student's senior year.

Minor in Psychology (19 cr. hrs.)

Introduction to General Psychology (PSYC-201) and 15 additional credit hours are required. No 100-level courses are acceptable, and only one 200-level course in addition to PSYC-201 may be used. All grades must be "C" or higher. Students who transfer in a 3 credit hour course equivalent to PSYC-201 may complete the minor with 18 credit hours. Transfer students must complete a minimum of 9 credit hours in the minor at this University.

Minor in Gerontology (18 cr. hrs.)

The minor in gerontology is designed to help meet the need for trained professionals in the field of aging. Students gain theoretical knowledge about the process of aging as well as the practical knowledge needed to work with the aged. Courses focus on both middle-aged and older adults. Transfer students must complete a minimum of 9 credit hours in the minor at this University.

Required Courses:

PSYC-AGED-221 Introduction to Gerontology3 cr.
PSYC-AGED-384 Psychotherapy with the Aging3 cr.
PSYC-AGED-385 Psychosocial Development
and Aging3 cr.

PSYC-AGED-386 Seminar in Aging3 cr.
Practicum or field placement (in a designated academic
department or in the Department of Psychology)3 cr.

SOC-312 Sociology of Health Care or
SOC-357U Intergenerational Perspectives3 cr.

Total 18 cr.

NOTE: The same courses may not be used to fill requirements in two different programs within the department.

NEUROSCIENCE

The departments of Psychology and Biology co-sponsor courses designed to prepare students for graduate work in areas related to neuroscience. The courses emphasize interdisciplinary studies and actual research experience. Interested students are advised to contact the chairperson of the Psychology or Biology Departments as early as possible in their academic careers.

FIELD EXPERIENCE

Academic credit may be earned through relevant work at field centers such as: psychiatric hospitals, correctional facilities, drop-in centers, schools, and businesses. The work may involve counseling, outreach, tutoring, or research. This program serves to integrate theoretical concepts with practical experience. Training is jointly supervised by a field experience supervisor on site and a faculty member on campus. Information about an undergraduate field experience may be obtained from the program advisor in the psychology department.

GRADUATE PROGRAM

Master of Arts in Gerontology

The master's degree program in gerontology has two purposes. Through required courses it provides students with a broad conceptual foundation for further study and research in the field of gerontology. Through elective courses in gerontology as well as graduate courses in other departments, it encourage students to develop expertise either in direct service to older people or administration and policy analysis.

The program also prepares students for advanced studies leading to the Ph.D.

By design, the program is part-time, with courses offered in the evening. A student may graduate in 3 years by enrolling in two courses (6 cr.) fall and spring semesters.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Applicants must have obtained a bachelor's degree from an accredited institution. They must have completed 15 undergraduate hours in the social sciences (psychology, sociology, anthropology, etc.). Of these 15 hours, at least 3 hours must be in gerontology. Applicants with at least 6 months of direct work experience with the elderly may petition to substitute this experience for the 3 hours of prerequisite credit in gerontology. In addition, applicants must have completed one course in research methods or statistics. Finally, all applicants must submit a 2-3 page essay outlining their interests and objectives in the field of gerontology. No specific entrance examinations are required.

Requirements for the Degree:

To obtain a master's degree in gerontology, a student must complete 36 credit hours of work. This will include 21 required and 15 elected hours. No more than 3 of the elective courses may be taken at the 300 level. A student is required to write a research paper or master's thesis. Required and elective courses are taken according to whether a student writes a research paper or thesis, and an internship will be prescribed for students who lack formal experience in working directly with the elderly.

Required Courses:

A. Research paper option.

PSYC-AGED-401	Aging: The Individual and Society	3 cr.
PSYC-AGED-402	Developmental Processes and Aging	3 cr.
PSYC-AGED-408	Research Methods	3 cr.
PSYC-AGED-420	Research Seminar	3 cr.
PEMT-478	Physiology of Human Aging	3 cr.
PSYC-AGED-410	Administration of Social Service Agencies	3 cr.
MNGT-370	Introduction to Management	3 cr.
		21 cr.

B. Thesis option.

PSYC-AGED-401	Aging: The Individual and Society	3 cr.
PSYC-AGED-402	Developmental Processes and Aging	3 cr.
PSYC-AGED-408	Research Methods	3 cr.
PEMT-478	Physiology of Human Aging	3 cr.
MNGT-370	Introduction to Management	3 cr.
PSYC-AGED-422	Thesis Seminar	6 cr.
		21 cr.

Elective Courses: Select 15 credit hours. (See UNI catalog for course descriptions in other departments.)

PSYC-AGED-406	Aging and the Family	3 cr.
PSYC-AGED-410	Administration of Social Service Agencies	3 cr.
PSYC-AGED-412	Psychodynamics of Aging	3 cr.
PSYC-AGED-416	Internship	3 cr.
PSYC-AGED-418	Public Policy and Aging	3 cr.
ANTH-317	Health, Illness, and Culture	3 cr.
COUN-473	Introduction to Family Counseling	3 cr.
COUN-474	Advanced Family Counseling	3 cr.
COUN-476	Grief Counseling	3 cr.
EDFN-418	Seminar in Development and Learning	3 cr.
HRD-401	The Adult Learner	3 cr.
MNGT-371	Organizational Behavior	3 cr.
MNGT-374	Human Resource Planning	3 cr.
PSCI-AMER-311	Public Policy	3 cr.
PSYC-304E	Proseminar: Family Studies	3 cr.
PSYC-312	Abnormal Psychology	3 cr.
PSYC-332	Introduction to Psychotherapy	3 cr.
PSYC-350	Theories and Methods of Group Interaction	3 cr.
SOC-302	Sociology of Aging	3 cr.
SOC-312	Sociology of Health Care	3 cr.
SOC-338	Sociology and Social Policy	3 cr.
SPCH-COMM-316	Family Communication	3 cr.
Total Elective Hours		15 cr.
Program Total		36 cr.

COURSE OFFERINGS

PSYC-101 Human Relations: An Experiential Approach, 3 cr. Human relations studied through direct application of personal experience and interaction with other students.

PSYC-102 Topics in Contemporary Psychology, 3 cr. An introduction to the study of psychology as a dynamic and changing system of interrelated and interacting areas.

PSYC-112 Parenting, 3 cr. A practical course for parents and parents-to-be emphasizing psychological principles for encouraging appropriate and eliminating inappropriate behavior in children.

PSYC-128 Psychology of Mental Health, 3 cr. Principles of mental health and the application of these principles to everyday living.

PSYC-201 General Psychology, 4 cr. General introduction to the study of psychology as a science. A personalized system of instruction permits flexible scheduling and different rates for fulfilling requirements. The text covers approximately 25-30 units of material. Tutoring and instructional aides are available.

PSYC-203 Psychology and Social Issues, 3 cr. The contribution of psychology to the study of contemporary social issues. The relevance of psychological approaches to such areas as war and peace, automation, population problems,

civil rights, etc. Emphasis is placed on how psychological knowledge may be applied to study, understand and influence the changing world scene.

PSYC-204 Simple Statistics for Research, 3 cr. Simple statistics applied to analysis of research subject areas.

PSYC-212 Child Psychology, 3 cr. Basic theories, concepts, principles, and research data concerning the physical, intellectual, emotional, and social aspects of development in children.

PSYC-215 Introduction to Humanistic Psychology, 3 cr. Introduction to the basic principles of Third Force Psychology and their practical applications through reading and discussion of the major proponents. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-301 Developmental Psychology, 3 cr. Longitudinal study of the development of behavior throughout the life span, including physiological factors and their bearing on the psychosocial adjustment of the individual in childhood, adolescence, adulthood, and later maturity. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-304 Pro-Seminar in Psychology, 3 cr. Special and timely topics in psychology. Discussion, reading, and/or library research. Consult the Schedule of Classes for specific topics. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-306 Operant Conditioning Lab, 3 cr. Introduction to quantitative and experimental techniques in psychology as a natural science. Course work will cover experimental design, data collection and interpretation centered around operant conditioning techniques with the rat. *Prereq.: PSYC-201.*

PSYC-307 The Personality of Americans, 3 cr. Personality and culture in the United States: the entire life cycle of the individual is considered but special emphasis is placed upon the development of children and adolescents. Special attention is paid to the educational system and the family and to their effects upon the individual. *Prereq.: PSYC-311 or consent of instructor.*

PSYC-309 Introduction to Culture and Personality, 3 cr. The role of culture in the development of personality; analysis of the biopsychological nature of man; illustrative materials are drawn from a wide variety of sources, literate and nonliterate. *Prereq.: PSYC-311 or consent of instructor.*

PSYC-310 Psychological Aspects of Disturbance in Adolescence, 3 cr. Study of the psychological dynamics and of the problems and conflicts which the adolescent may experience during this distinct phase of his/her life. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-311 Psychology of Personality, 3 cr. Contemporary theories of personality development and personality dynamics, and definitions of the healthy personality. *Prereq.: PSYC-201.*

PSYC-312 Abnormal Psychology, 3 cr. Overview of psychopathology; similarities and differences between "normal" and "abnormal" groups. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-313 Social Psychology, 3 cr. Basic principles and research techniques in social perception, attitude formation, group dynamics, interpersonal attraction, and social influence. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-314 Industrial Psychology, 3 cr. An introductory survey of the diverse field of industrial psychology. Personnel selection, business organizations, marketing and advertising, human factors and human engineering, worker-supervisor relations, and executive behavior. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-315 Psychological Development in Women, 3 cr. Psychological development and identity formation in women with emphasis on personality, psychosexual, and cognitive development. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-316 Physiological Psychology, 3 cr. Lectures on physiological research techniques; ablation, lesioning, electrophysiology, and neurochemistry. The neuron, synaptic, electrical and chemical events, sensory physiology, psychopharmacology, memory mechanisms, emotions, and vegetative functions are covered. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-317 Introduction to Statistical Methods in Psychology, 3 cr. A first course in statistical methods for students in psychology and education: statistical procedures and scientific methods in educational psychological research, elementary statistical concepts, probability and sampling, correlation methods, and tests of significance. *Prereq.: PSYC-201 and proficiency in high school algebra.*

PSYC-318 Introduction to Experimental Psychology, 3 cr. Philosophy and methods of research in psychology: designing experiments, analyzing research data, and identifying difficulties in conducting good research. *Prereq. or Coreq.: PSYC-317.*

PSYC-320 Psychosexual Development, 3 cr. Study of the development of sex differences, from the acquisition of sex role identity in childhood through sex differences in adult personality, cognition, and role behavior. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-321 Inferential Statistics, 3 cr. An extension of concepts covered in the introductory statistics course (PSYC-317): advanced correlation techniques, analysis of variance, and sampling statistics. *Prereq.: PSYC-317 or consent of instructor.*

PSYC-323 Human Perception, 3 cr. Study of how our perceiving and performing systems convert information from the environment and the self to action in everyday life. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-325 Laboratory, Research Methods in Psychology, 3 cr. Research designs applicable to the study of different sub-disciplines within psychology, e.g., child development, personality development, etc. Collection, analysis, interpretation of research data, and reporting results. *Prereq.: PSYC-318.*

PSYC-327 Psychology of Learning, 3 cr. Psychological study of the processes of learning, problem-solving, and memory. Major historical theories of learning; demonstration of some basic research techniques. *Prereq.: PSYC-201 or PSYC-102.*

PSYC-328 Advanced Child Psychology, 3 cr. Growth of the child's emotional life and personality and basic development principles. Psychological difficulties in children will be studied insofar as this study sheds light on the course of normal development. *Prereq.: PSYC-212.*

PSYC-329 Adolescent Psychology, 3 cr. Nature of adolescent development and adjustment: physical, intellectual, emotional, and social aspects. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-331 Psychological Tests and Measurements, 3 cr. Principles and methods of measurement and evaluation: elementary statistical concepts, reliability and validity, interpretation of test results, standards for psychological and educational tests, principles of test construction, and use of psychological and educational tests. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-332 Introduction to Psychotherapy, 3 cr. Overview of various approaches to psychotherapy. *Prereq.:* PSYC-311 or PSYC-312, or consent of instructor.

PSYC-333 Culture and Personality: The Uses of Folklore, 3 cr. Contributions of folklore to various types of psychological investigation, in particular to the study of "national character"; practice in the analysis of emotional (as opposed to cognitive) symbolism. *Prereq.:* PSYC-311 or consent of instructor.

PSYC-334 Child Development in Cross-Cultural Perspective, 3 cr. Comparative studies of child rearing practices in varying cultural and sub-cultural milieus, including those in the United States; effects of such differences on subsequent adult personality in the cultures under consideration; problems of "normal" and "abnormal" behavior. *Prereq.:* PSYC-311 or consent of instructor.

PSYC-335 History of Psychology, 3 cr. Psychology as a science from Wundt to present day. The course examines systems and describes and evaluates theories. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-336 Childhood Psychosis, Autism, and Schizophrenia, 3 cr. A study of the following topics in the area of childhood psychoses: the nuclear schizophrenic child as described by Bender, Kanner's early infantile autism, the symbiotic psychotic child as described by Mahler, and the child with schizophrenic adjustment to neurological dysfunction. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-337 Humanistic Theories of Personality, 3 cr. Approaches of the third force psychologists to the study of personality development. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-338 Crosscultural Psychoanalytic Approach to Psychosexual Development, 3 cr. The development of sexual differences from childhood to adulthood; the cultural organization of gender and sexuality. *Prereq.:* PSYC-340.

PSYC-339 Seminar in the Teaching of Introductory Psychology, 3 cr. Consideration and evaluation of techniques, content, and organization appropriate for teaching a beginning course in psychology. *Prereq.:* completion of 15 hours in psychology and consent of instructor.

PSYC-340 Psychoanalytic Theories of Personality, 3 cr. Systematic comparison of the central concepts of Freudian and Neo-Freudian analytic psychology, with special emphasis upon the contributions of ego psychology, implications for learning and for normal and abnormal personality development. *Prereq.:* PSYC-311.

PSYC-341 Introduction to Modern Psychology: General Psychology in Terms of Feedback Control Systems Theory, 3 cr. Feedback theory of human behavior. The concept of environmental control through negative feed-

back. Reinterpretation of traditional topics in psychology in terms of feedback theory.

PSYC-342 Modern Psychology II: Development of Higher Level Systems, Early Learning to Personality, 3 cr. Further development of concepts presented in PSYC-341. Specific demonstration of feedback control in human behavior. Problems of research and application. *Prereq.:* PSYC-341.

PSYC-345 Seminar in Drug Abuse, 3 cr. Lectures, discussion, and selected readings concerning the psychological, sociological, and physiological aspects of drug abuse. *Prereq.:* PSYC-201 or PSYC-102, or an introductory biology course, or an introductory health education course.

PSYC-350 Theories and Methods of Group Interaction, 3 cr. Study and application of the underlying principles of several approaches to group processes; e.g., T-groups, growth (Rogerian) groups, rational-emotive groups, Gestalt groups, T.A. groups. *Prereq.:* PSYC-201 or PSYC-102 or consent of instructor.

PSYC-351 Senior Seminar in Psychology, 3 cr. Research and preparation of papers; provides for individual work by the student, and guidance through criticism by fellow students and faculty. *Prereq.:* PSYC-318 and consent of instructor.

PSYC-352 Small Group Processes, 3 cr. Study of the structures and interpersonal dynamics of small groups. *Prereq.:* PSYC-201 or PSYC-102.

PSYC-353 Advanced Group Dynamics, 3 cr. Advanced study of the various methods and theories of group interaction and their application. *Prereq.:* PSYC-350 or PSYC-352.

PSYC-354 Physiological Psychology Lab I, 3 cr. Techniques employed in the investigation of brain functions including surgical and testing procedures such as ablation, electrolytic lesions, implants of permanent electrodes, operant conditioning techniques, pharmacological experiments and demonstrations. *Prereq.:* PSYC-316 or 12 hours of biology and consent of instructor.

PSYC-357 Independent Study in Psychology, 3 cr. Special study projects in psychology specifically and individually contracted with the instructor. Arrangements should be made in the term prior to registration. *Prereq.:* PSYC-201 or PSYC-102 and written consent of instructor.

PSYC-358 Independent Study in Psychology, 2 cr. (See PSYC-357 for description.)

PSYC-360 Laboratory Research Methods in Psychology: General, 3 cr. Experience in the practice of psychology is provided by experiments and exercises of a general nature and the evaluation of data derived from them. *Prereq.:* PSYC-318.

PSYC-361 Laboratory Research Methods in Psychology: Clinical/Social, 3 cr. Techniques for research in the areas of clinical and social psychology. *Prereq.:* PSYC-318.

PSYC-362 Laboratory Research Methods in Psychology: Perception and Cognition, 3 cr. Research techniques and experiments in perception, cognition and learning. *Prereq.:* PSYC-318.

PSYC-363 Laboratory Research Methods in Psychology: Tests and Measurements, 3 cr. Development, construction, scoring, standardization, determination of reliability and validity of simple tests in psychology. *Prereq.:* PSYC-317.

PSYC-364 Proseminar in Learning: "Co-teaching," 3 cr. Study of the teaching-learning process. The student serves as an undergraduate teaching assistant in an appropriate psychology course. *Prereq.:* PSYC-201 and consent of instructor.

PSYC-368 Independent Study in Psychology, 3 cr. Special study projects in psychology specifically and individually contracted with the instructor. Arrangements should be made in the term prior to registration. *Prereq.:* PSYC-201 or PSYC-102 and written consent of instructor.

PSYC-379 Field Experience in Psychology I, 3 cr. Experiential learning in psychology-related settings (such as psychiatric hospitals and schools) integrating both academic work and on-the-job experience. Arrangements should be made in the term prior to registration. *Prereq.:* PSYC-201 or PSYC-102 and consent of instructor.

PSYC-380 Field Experience in Psychology II, 3 cr. Advanced and specialized work. (See PSYC-379 for description.) Arrangements should be made in the term prior to registration. *Prereq.:* PSYC-201 or PSYC-102 and consent of instructor.

PSYC-381 Introduction to Neuropsychopharmacology, 3 cr. Discussion of neuronal synapse and neurotransmitter action, and of the physiology and basic chemistry of the better known putative neurotransmitters; overview of the major and minor tranquilizers, the antidepressants, and the hallucinogens; examination of the better known relationships between neurochemistry, psychopharmacology, and behavior. *Prereq.:* PSYC-316.

PSYC-382 Physiological Bases of Mental Disorders, 3 cr. Physiological and genetic aspects of mental disorders: major theories and current research models with emphasis on current literature and primary sources. *Prereq.:* PSYC-316.

PSYC-395 The Psychology of Speech, Language, and Thought Development in the Child, 3 cr. Readings and discussion of the theories of speech, language, and thought development. *Prereq.:* PSYC-212 and SPCH-PATH-372 or consent of instructor.

PSYC-397 Psychopathology of Childhood, 3 cr. Study of the dynamics of pre-adolescent neurotic disturbances. *Prereq.:* PSYC-311.

PSYC-414 Advanced Adolescent Psychology, 3 cr. Comprehensive presentation of theory and research in adolescent development; focus on intellectual, social, physical and emotional growth; problems of adjustment, interpersonal relationships, and identity. *Prereq.:* graduate standing and PSYC-329.

PSYC-425 Group Psychotherapy I, 3 cr. Developing basic skills in group psychotherapy. *Prereq.:* graduate standing and consent of instructor.

PSYC-426 Group Psychotherapy II, 3 cr. Further development of skills in group psychotherapy. *Prereq.:* graduate standing, PSYC-425 and consent of instructor.

PSYC-436 The Therapist and the Therapeutic Process, 3 cr. Developing basic skills in psychotherapy. *Prereq.:* graduate standing and completion of 12 credit hours in psychology, including PSYC-332 or equivalent.

PSYC-451 Research Methodology Seminar, 3 cr. Formulation of hypotheses, statistical procedures as related to design of experiments with particular reference to the major

types of research design used with the study of human behavior. *Prereq.:* graduate standing and PSYC-331.

Aging

PSYC-AGED-221 Introduction to Gerontology, 3 cr. Introductory review of the nature of the aging population: characteristics, psychosocial aspects of aging. Overview of ideas and interests in gerontology.

PSYC-AGED-384 Counseling and Psychotherapy for the Aging, 3 cr. Principles of therapeutic intervention for persons 50 years and older using strategies appropriate for this age group. *Prereq.:* PSYC-AGED-221 or PSYC-332.

PSYC-AGED-385 Psychosocial Development and Aging, 3 cr. Exploration of behavioral development and of the influence of social and environmental factors on the psychosocial development throughout the life span. *Prereq.:* PSYC-AGED-221.

PSYC-AGED-386 Seminar in Aging, 3 cr. Integrated and critical evaluation of problems and issues related to aging; assessment of research and of its application to the establishment of programs for the aged. *Prereq.:* PSYC-AGED-221.

PSYC-AGED-401 Aging: The Individual and Society, 3 cr. An overview of gerontology, with emphasis on the demographic, economic, social and psychological characteristics of older people. This course will also examine social policy responses to this growing segment of the population. *Prereq.:* Graduate standing.

PSYC-AGED-402 Developmental Processes in Later Life, 3 cr. A life-span perspective focusing on individual aging processes in later life. Aging in adulthood and maturity will be approached from both psychological and sociological literature. *Prereq.:* PSYC-AGED 401 or consent of instructor.

PSYC-AGED-406 Aging and the Family, 3 cr. The role of the family in providing physical, emotional, and financial support over the life-span in a society that has increasing numbers of 3, 4, and 5 generation families. *Prereq.:* PSYC-AGED 401 or consent of instructor.

PSYC-AGED-408 Research Methods, 3 cr. An introduction to experimental and quasi-experimental research methods relevant to the field of gerontology. Focus will be on designing, conducting, analyzing, and interpreting research. *Prereq.:* graduate standing.

PSYC-AGED-410 Administration of Social Service Agencies, 3 cr. This course addresses the problems of budgeting, personnel recruitment and management, program planning, evaluation, public relations, and response to legislation in non-for profit agencies serving older people. *Prereq.:* graduate standing.

PSYC-AGED-412 Psychodynamics of Aging, 3 cr. An exploration of the literature on developmental and psychological processes in later life from the perspective of mental health. *Prereq.:* PSYC-AGED-402.

PSYC-AGED-416 Internship in Gerontology, 3 cr. An opportunity to acquire practical experience and apply knowledge in settings involving older people. The internship is required for students who have not had experience working

with this age group. Students who wish to acquire new professional experiences may also elect an internship. **Prereq.:** PSYC-AGED-412.

PSYC-AGED-418 Public Policy and Aging, 3 cr. Major health care and economic policies affecting the elderly are examined to assess and understand their impact on lifestyle and social conditions. **Prereq.:** PSYC-AGED-402.

PSYC-AGED-420 Research Seminar, 3 cr. The integration of theoretical knowledge, practical application and research skills preparing the student to write a research paper on an interdisciplinary topic in aging. **Prereq.:** PSYC-AGED-408.

PSYC-AGED-422 Thesis Seminar, 6 cr. Focus on conceptualization and development of research that will fulfill requirements for a master's thesis in gerontology. **Prereq.:** PSYC-AGED-408 and acceptance to Master's degree candidacy.

PSYC-AGED-455 Advanced Topics in Aging, 3 cr. Social and psychological theories and concepts will be used to understand the aging person. Constructive intervention techniques for optimal aging will be discussed in topics such as health, sex roles, personality adjustments, and the family. Analysis of research on aging from a multidisciplinary approach. **Prereq.:** graduate standing and PSYC-385 or PSYC-386 or equivalent.

SOCIAL WORK

Wanda Bracy, M.S.W., Associate Professor, Chairperson
O. Evalyn Vigil de McCoy, M.A., Professor
Jane Peller, M.A., Associate professor

The Department of Social Work offers a Bachelors of Arts Degree in Social Work (BASW) accredited by the Council on Social Work Education. The curriculum is designed to prepare beginning level generalist social work practitioners committed to the values and ethics of the profession and to the provision of quality services to diverse clients. Coursework and field experiences expose students to a variety of social work settings and clients representing socio-cultural backgrounds.

UNDERGRADUATE PROGRAMS

Major in Social Work for the Bachelor of Arts Degree

Liberal Arts Requirements:.....19 cr.
ANTH-212 Cultural Anthropology.....3 cr.
BIOL-100 Introduction to Biology.....3 cr.
ECON-215 Principles of Macroeconomics.....3 cr.
PSCI-AMER-216 American National Government.....3 cr.
PSYC-201 General Psychology.....4 cr.
SOC-100 Introduction to Sociology.....3 cr.

Required Courses in Social Work:.....42 cr.
SWK-200 Introduction to Social Work.....3 cr.
SWK-206 Human Behavior and the Social Environment I.....3 cr.
SWK-207 Social Welfare Programs and Services.....3 cr.

SWK-304 Social Work Practice I.....3 cr.
SWK-305 Social Work Practice II.....3 cr.
SWK-306 Human Behavior and the Social Environment II.....3 cr.
SWK-309 Research and Quantitative Applications in Social Work.....3 cr.
SWK-310 Research Practicum I.....3 cr.
SWK-311 Research Practicum II.....3 cr.
SWK-353 Field Seminar I.....3 cr.
SWK-354 Field Seminar II.....3 cr.
SWK-355 Field Practicum I.....3 cr.
SWK-356 Field Practicum II.....3 cr.
SWK-357 Analysis of Social Welfare Policies Services.....3 cr.

Electives in Social Work.....6 cr.
Total 67 cr.

Students interested in the major in social work must submit an application for admissions to the major and be approved by the Department's Admissions Committee. Application forms are available in the departmental office.

Minor in Social Work

Required Courses:

SWK-200 Introduction to Social Work.....3 cr.
SWK-207 Social Welfare Programs and Services.....3 cr.
Electives.....12 cr.
Total 18 cr.

The electives for the minor must be 200-level courses unless approved by the faculty advisor in the Department of Social Work.

COURSE OFFERINGS

SWK-200 Introduction to Social Work, 3 cr. Overview of the social work field, its philosophical basis, historical development and future growth; introduction to the concept of generalist practice.

SWK-202 Community Analysis, 3 cr. Methods of conduction research on local communities and racial/ethnic groups in the Chicago Metropolitan area; exposure to gathering, interpreting, and presenting information about a local community. **Prereq.:** SWK-200.

SWK-203 Analysis of Cross-Cultural Interaction, 3 cr. Development of sensitivity when interacting with persons of diverse racial/ethnic backgrounds. Role of culture in human behavior and how one's cultural interfaces with other cultures. **Prereq.:** SWK-200.

SWK-206 Human Behavior and the Social Environment I, 3 cr. Introduction to the ecological perspective to understand behavior of individuals, groups, families, institutions and communities. **Prereq.:** Liberal arts requirements and SWK-200. Open to social work majors only.

SWK-207 Social Welfare Programs and Services, 3 cr. Covers content on the history of social welfare, current

social welfare programs and the societal values that underlie these provisions.

SWK-208 Human Sexuality and Social Work, 3 cr. Knowledge of sexuality as it is expressed in a variety of lifestyles and the application of social work values and ethics when working with sensitive issues in sexuality.

SWK-250 Issues in Social Service Delivery, 3 cr. Covers major problems and issues in the field of social work. Topics vary. **Prereq.:** SWK-200.

SWK-302 Social Work Practice in Community Settings, 3 cr. Structure and functions of communities and models of community organizing; development of community organizing skills. **Prereq.:** SWK-200.

SWK-304 Social Work Practice I, 3 cr. Parameters of professional social work relationship; skills in interviewing and data collection strategies, problem identification and client system assessment necessary for generalist practice.

Prereq.: Liberal arts requirements, SWK-200 and SWK-206 or concurrent enrollment in SWK-206. Open to social work majors only.

SWK-305 Social Work Practice II, 3 cr. Skills in intervention planning, implementation, and evaluation of practice with different size systems and loci of intervention. **Prereq.:** SWK-304.

SWK-306 Human Behavior and the Social Environment II, 3 cr. Examination of individual development over the life span from a generalist perspective; focus on how various systems impinge on behavior within each life stage and for different cultural groups. **Prereq.:** SWK-206.

SWK-308 Administration and Planning in Social Work, 3 cr. Structure and function of formal organizations and administrative and planning tasks in social work agencies. **Prereq.:** SWK-304.

SWK-309 Research and Quantitative Applications in Social Work, 3 cr. Content on basic and applied research concepts and methodology; assessment of empirical research published in professional social work literature; interpretation of statistical analyses. **Prereq.:** SWK-200.

SWK-310 Research Practicum I, 3 cr. Taken concurrently with SWK-355. Development of research proposal describing research related to field practicum. **Prereq.:** SWK-309.

SWK-311 Research Practicum II, 3 cr. Taken concurrently with SWK-356. Continuation of SWK-310. Focuses on data collection and analysis and implications of findings for social work practice; research report prepared on personal computer. **Prereq.:** SWK-310.

SWK-327 Social Work Practice with Families, 3 cr. Overview of the field of family therapy; various approaches, differences in their underlying theoretical assumptions and their application in social work family assessments and interventions. **Prereq.:** SWK-304.

SWK-353 Field Seminar I, 3 cr. Taken concurrently with SWK-355. Integration of knowledge, values and skills with experience in the field practicum. **Prereq.:** SWK-305 and successful completion of English competency exam.

SWK-354 Field Seminar II, 3 cr. Taken concurrently with SWK-356. Continuation of SWK-353. **Prereq.:** SWK-353.

SWK-355 Field Practicum I, 3 cr. Taken concurrently

with SWK-353. Beginning field experience; students are placed in a social work agency providing the opportunity to develop, test and reinforce social work knowledge, values and skills. **Prereq.:** SWK-305.

SWK-356 Field Practicum II, 3 cr. Taken concurrently with SWK-354. Continuation of SWK-355. **Prereq.:** SWK-355.

SWK-357 Analysis of Social Welfare Policies and Services, 3 cr. Critical analysis of social welfare policies and programs; focus on the impact of policy on direct practice. **Prereq.:** SWK-207. Open to social work majors only.

SOCIOLOGY

Samuel Betances, Ed.D., Professor
Iva Carruthers, Ph.D., Professor
Ronald Glick, D.Crim., Professor
Mary Ann Schwartz, Ph.D., Professor
Barbara M. Scott, Ph.D., Assistant Professor
Daniel Stern, Ph.D., Professor
Martha Thompson, Ph.D., Professor, Chairperson

The Department of Sociology offers courses leading to a Bachelor of Arts degree in sociology.

Sociology is the systematic study of human societies, their patterns and arrangements, their processes of development and change. Departmental course offerings cover sociological theories, research methods, women's studies, race and ethnicity, social institutions, social issues, and social change.

A major in sociology can provide a useful orientation for students who plan to attend graduate school or seek careers in such fields as education, criminal justice, urban planning, law, social welfare, or research in government and private organizations.

UNDERGRADUATE PROGRAMS

Major in Sociology for the Bachelor of Arts Degree

Required Courses:

SOC-100 Introduction to Sociology.....3 cr.
SOC-335 Sociological Theory.....3 cr.
SOC-337 Methods of Sociological Inquiry.....3 cr.
SOC-346 Social Stratification.....3 cr.
Electives in Sociology.....24 cr.
Total 36 cr.

Minor in Sociology

Required Courses:

SOC-100 Introduction to Sociology.....3 cr.
SOC-335 Sociological Theory.....3 cr.
SOC-337 Methods of Sociological Inquiry.....3 cr.
Electives in Sociology.....9 cr.
Total 18 cr.

COURSE OFFERINGS

SOC-100 Introduction to Sociology, 3 cr. Fundamental concepts involved in understanding human societies. Socialization, culture, social interaction, social institutions, social stratification, and social change are discussed.

SOC-103 Social Inequality, 3 cr. Overview of the major historical, economic and sociological forces which have combined to shape the patterns and kinds of social inequality in the United States. Topics include class inequality, racial and ethnic inequality, sexism, ageism and handicappism. Systems of inequality in other societies are also examined.

SOC-105 Women, Men, and Social Change, 3 cr. This course will examine the roots of gender expectations and gender divisions; and historical and cultural variations in how gender has and is perceived. The course will raise questions about the consequences of the social organization of gender relations and the possibilities for change in the positions of men and women in society.

SOC-204 Individuals, Groups and Society, 3 cr. A study of the individual and group relationships in society in terms of the various types of social collectives; primary and secondary groups, crowds and publics, collective behavior and social movements with emphasis on the symbolic nature of social interaction.

SOC-205 Contemporary Social Issues, 3 cr. Analysis and interpretation of major contemporary social issues, such as war and peace, poverty, racism, sexism, power structures; critical evaluation of present and suggested programs to meet current problems.

SOC-206 Sociology of Drug Abuse, 3 cr. Review of literature and current research on drug abuse. Examination of leading social explanations of drug abuse and consideration of drug treatment and prevention approaches.

SOC-210 Revolution and Conflict, 3 cr. An analysis of selected major revolutions and/or revolutionary movements in developing and industrialized nations.

SOC-214 Sociology of Marriage and the Family, 3 cr. The major issues involved in the criticisms of family systems with a view to predicting how current forms are likely to mesh with changing trends to form marriage and family patterns in the future. Areas of study include family history, changing demographic patterns, family structures, gender roles, sexuality, reproductive technology, marital interaction and power, marital dissolution, and reconstituted families.

SOC-216 Contemporary American Institutions, 3 cr. An extensive examination of selected contemporary American institutions and their interrelationships.

SOC-221 Sociology of Work, 3 cr. Examines work as both a social and economic phenomenon; focuses on the role of work in people's lives and on the nature of occupational roles as an element of social structure. Areas of study include the impact of technology on the meaning and organization of work, the global economy, reward structures, unemployment, and the changing composition of the labor force of the future. *Prereq.: SOC-100.*

SOC-250 Sociology of Deviance, 3 cr. Overview of the sociological works, both past and present, in the area of social deviance. In addition, traditional and alternative definitions and explanations of deviant behavior will be explored.

SOC-270 Social and Economic Issues Confronting Latina Women, 3 cr. Study of the role played by women in Latin America, and the social, economic and political issues that affect their lives. The relationship between class and gender, and the impact of modernization of women's roles and status in Latin America will also be examined.

SOC-302 Sociology of Aging, 3 cr. The aging process, examined from both an individual and societal perspective; problems, potentials, and realities of aging. Topics of study include the nature and quality of relations among members of different generations, age norms, age constraints, and adult socialization as well as historical and cross-cultural comparisons of aging. *Prereq.: SOC-100.*

SOC-306 American Women: The Changing Image, 3 cr. Analyzes women's varying roles, statuses and life opportunities; covers the feminist movement, past and present with special emphasis on struggles over conflicting definitions of women's "nature" and potential. Serves as an introduction to other courses in women's studies.

SOC-308 Sociology of the Syndicate, 3 cr. A systematic analysis of organized crime covering its history, present structure and activities, and its relationship to the U.S. ruling class and law enforcement agencies.

SOC-309 Sociology of Racism, 3 cr. Survey of the sociological and historical development of the theories of race and racism and the impact these theories have had on the implementation of social policy. Black experience in America is highlighted and special attention is given to institutional expressions of racism in the Western world. *Prereq.: SOC-100.*

SOC-312 Sociology of Health and Illness, 3 cr. Survey of theory and research concerning social and cultural factors in determining health and illness and description of health care organization and practice. Societal responses to health care problems.

SOC-313 Population and Demography, 3 cr. Population characteristics and population dynamics in a variety of cultural settings; political, economic, and sociological implications of population trends, resources and approaches in demographic analysis. *Prereq.: SOC-100 or consent of instructor.*

SOC-314 Urban Sociology, 3 cr. Population characteristics, social structure, social change, and social policy associated with urbanization and community development. Focus on problems of the inner city.

SOC-316 Race and Ethnic Relations, 3 cr. A cross-cultural study of the patterns of interaction between racial and ethnic groups, analysis of the sources of prejudice and discrimination; examination of the relationships between race and ethnic relations and patterns of stratification.

SOC-317 Sociology of Religion, 3 cr. Study of the social aspects of religious beliefs, practices and participation. The Church as a social institution and its relationship to

social class, social control. Religion as a form of expressive behavior. The function of religion for the individual and for different social groups. *Prereq.: SOC-100 or consent of instructor.*

SOC-318 Socialization Processes, 3 cr. Examination of socialization processes. Consideration of various theories from a symbolic-interactionist perspective, in which the individual is studied as a participant in groups, with special emphasis on sex role socialization.

SOC-319 Topics in Race and Ethnicity, 3 cr. Exploration at an advanced level of selected issues in race and ethnicity. Consult the Schedule of Classes for specific topics.

SOC-320 Topics in Sex and Gender, 3 cr. Exploration at an advanced level of current issues and concerns in the sociology of sex and gender. Consult the Schedule of Classes for specific topics.

SOC-321 Topics in Medical Sociology, 3 cr. Exploration at an advanced level of selected issues in sociology of health and illness with emphasis on the assumptions and practices of the American Medical establishment. Consult the Schedule of Classes for specific topics.

SOC-324 Political Sociology, 3 cr. An examination of the historical and contemporary dynamics of American political institutions considered as forces determining "who gets what, when, where, and how" in American society.

SOC-325 Sociology of Mental Health, 3 cr. An overview of current knowledge of the causes, cures, or symptoms of mental disorders provided from a variety of perspectives. The significant relationship between mental illness and social conditions will be examined with particular emphasis on societal reaction to mentally ill people and to the mechanisms of social control.

SOC-328 Extreme Right Groups, 3 cr. Various groups in the U.S. have traditionally used racism, sexism, and anti-semitism to justify political and physical attacks against people of color, feminists, and Jewish people. More recently, lesbians, gays, and people with A.I.D.S. have been the targets of their attacks. This course examines the Klan/Nazi/neo-Nazi movements in the U.S. and Western Europe, and focuses on key groups for intensive study.

SOC-329 Sociology of Violence, 3 cr. Cross cultural study and focus on social and psychological explanations of violence in American society.

SOC-330 Upper Strata Crime in America, 3 cr. Examination of patterns in white collar crime, corporate infractions and government crime.

SOC-331 Military Sociology, 3 cr. Focus on the question of U.S. military response to problems in Third World countries. In non-technical language, the issues of nuclear policy are discussed in the context of the strategic nuclear balance with the USSR. U.S. political-military responses to insurgencies and revolutions are discussed within the framework of the new military doctrine of low intensity warfare.

SOC-332 Education As a Social Institution, 3 cr. Analysis of education as a cultural universal; the mutual influences of other social institutions and education; factors involved in the socialization of student personality; the urgent

search for relevant values and standards for liberal arts education in a period of rapid and fundamental social change.

SOC-335 Sociological Theory, 3 cr. History of social thought, the various interpretations of societal patterns; the theoretical orientations of classical sociological figures including Marx, Durkheim, and Weber and more recent orientations including conflict theory, symbolic interaction, and structural functionalism. *Prereq.: SOC-100 or consent of instructor.*

SOC-337 Methods of Sociological Inquiry, 3 cr. Emphasis on increasing students abilities to communicate their understanding of social science research. Focus on learning social science research vocabulary, developing an understanding of issues in the philosophy of the social sciences, learning steps and procedures in sociological research, and using writing skills relevant to social science research. *Prereq.: SOC-100 or consent of instructor.*

SOC-338 Topics in Social Policy and Social Change, 3 cr. Exploration at an advanced level of a social issue and the social policies that have been developed to deal with it. Consult the Schedule of Classes for specific topics. *Prereq.: SOC-100 or consent of instructor.*

SOC-340 Sociology of Sexuality, 3 cr. Critical discussion and reading of current research and literature on human sexuality; the continuous psycho-sexual development of children, adolescents and adults; heterosexuality, homosexuality and bisexuality; the use of sex by the media; pornography; prostitution; sex and the law; institutional sexuality; population control; marital sex; the effects of class background on sexual practices.

SOC-341 Independent Study in Sociology, 3 cr. Research study in an area of special interest to the student involving research methodology and field studies. *Prereq.: consent of instructor.*

SOC-344 Sociological Portrait of Black Women, 3 cr. Examination of Black women's collective experience, contemporary and historical; myths and realities of Black women's lives, including the combined effects of racism, sexism, and class oppression.

SOC-345 Topics in Social Movements, 3 cr. Exploration of a particular social movement at an advanced and in-depth level. Consult the Schedule of Classes for specific topics.

SOC-346 Social Stratification, 3 cr. Consideration of the role of social differentiation and stratification in the formation and maintenance of social organization; focus on the nature and consequences of various systems of economic stratification and inequality.

SOC-347 Sociology of Media, 3 cr. Focus on advertising and other forms of mass media; functions and effects of mass media and the social context in which they are created with special attention throughout the course on the presentation of women and minorities in the media.

SOC-351 Senior Seminar, 3 cr. Discussion, critical review and integration of students' work with current research. Preparation of a research paper with ongoing feedback from the instructor. *Prereq.: senior standing, SOC-335 and SOC-337 or consent of instructor.*

SOC-356 Field Methods in Sociology, 3 cr. A presentation of the various methods used in field research with emphasis on observation, intensive interviews, and archival research. Students conduct supervised field research. *Prereq.: SOC-337.*

SOC-357 Pro-Seminar in Sociology, 3 cr. Exploration at an advanced level of selected issues in sociology. Course topics vary and are generated by student demand, program need or faculty expertise. Consult the Schedule of Classes for specific topics. *Prereq.: SOC-100 or consent of instructor.*

SOC-360 Sociology of Occupations and Professions, 3 cr. Exploration of the historical, theoretical and empirical literature on occupations and professions. Issues to be explored include the relationship between occupations and the family, education, technology and the political environment.

SOC-373 Community Field Studies, 3 cr. Chicago metropolitan field investigation of community conditions, local institutions and action programs, field investigations of community conditions, local institutions and action programs. Field investigations may be broad or concentrate on a particular school or community. *Prereq.: SOC-337.*

SOC-375 Government Intelligence Agencies, 3 cr. A study of the various government agencies which collect intelligence within the U.S. and in foreign countries with emphasis on the kinds of intelligence gathered and the political uses to which it is put. The work of the CIA and the FBI are critically examined.

SOC-376 Sociology of Working Women, 3 cr. An examination of the paid and unpaid work which typically falls to women in American society, the social characteristics of that work and the ways in which women are both led to choose and prevented from leaving that work. Covers current and past changes in the nature of "women's work." Investigates sex discrimination in various sectors of the labor force and current efforts to combat it.

SOC-403 Independent Study in Sociology, 3 cr. Under the direction of an instructor, a student prepares a resource bibliography, reads relevant sources, and discusses the materials. A research paper is required. *Prereq.: graduate standing.*

SOC-404 Seminar in Sociology, 3 cr. Analysis of major topic areas in sociology with special emphasis on resources and techniques for research, investigation, and problem-solving. Consult the Schedule of Classes for specific topics.

Prereq.: admission to Master of Arts Social Science Program.

SPEECH AND PERFORMING ARTS

James W. Barushok, Ph.D., Professor
Karla Berry, M.F.A., Assistant Professor
Bernard J. Brommel, Ph.D., Professor
Kathleen Golden, M.A., Assistant Professor
Richard Hesler, M.A., Professor
Harold Hild, Ph.D., Associate Professor
David G. Jordan, Ph.D., Associate Professor

Maria Moraites, M.A., Professor
Durward A. Redd, M.A., Professor
William R. Stewart, M.A., Assistant Professor
David F. Unumb, Ph.D., Professor, Chairperson
Robert J. Walker, Ph.D., Professor

The Department of Speech and Performing Arts offers courses leading to the degrees of Bachelor of Arts and Master of Arts.

UNDERGRADUATE PROGRAMS

For each of the three programs listed below, the Department recommends broad preparation in related areas. Specifically, students preparing for secondary school teaching should complete a second major in English for state certification and discuss Chicago certification in English with their advisor. All transfer students are required to complete at least 5 courses offered by Northeastern's Department of Speech and Performing Arts.

Major in Speech for the Bachelor of Arts Degree

Required Courses:

SPCH-COMM-101 Foundations of Communication.....3 cr.
SPCH-COMM-202 Voice and Diction.....3 cr.

Two courses selected from the following:.....2 cr.
SPCH-COMM-205 Debate Laboratory1 cr.
SPCH-COMM-206 Individual Events Laboratory1 cr.
SPCH-MASS-208 Media Laboratory1 cr.
SPCH-PERF-139 Theatre Practicum.....1 cr.
SPCH-PERF-207 Interpreters Laboratory1 cr.

Two courses selected from the following:.....6 cr.
SPCH-COMM-201 Introduction to Semantics3 cr.
SPCH-COMM-215 Group Discussion.....3 cr.
SPCH-MASS-260 Basic Television Production3 cr.
SPCH-PATH-270 Introduction to the Field of
Communicative Disorders3 cr.
SPCH-PERF-130 Introduction to Theatre3 cr.
SPCH-PERF-255 Oral Interpretation of
Literature.....3 cr.

Electives: (including at least 12 credit hours
at the 300 level).....18 cr.

Total 32 cr.

Students seeking certification to teach speech in secondary schools are required to consult with the department advisor to ensure completion of 18 credit hours in speech selected from the following four areas: public speaking, interpersonal communication, oral interpretation, and group discussion. They are required as well to take 6 credit hours in rhetoric and composition from the English department. In addition, they should consult the Secondary Education section of this catalog.

Minor in Speech for the Bachelor of Arts Degree in Elementary Education

Required Courses:

Select two from the following:.....6 cr.
SPCH-COMM-101 Foundations of
Communication.....3 cr.
SPCH-COMM-202 Voice and Diction3 cr.
SPCH-COMM-210 Public Speaking3 cr.
SPCH-COMM-215 Group Discussion.....3 cr.
SPCH-PERF-255 Oral Interpretation
of Literature3 cr.

Electives:.....12 cr.
selected in consultation with a department advisor; 6 of
which must be at the 300 level,

Other electives:.....12 cr.
6 hours from each of two of the following areas:
English
Foreign Languages
Linguistics
Total 30 cr.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

Minor in Speech (18 cr. hrs.)

Required Courses:

SPCH-COMM-101 Foundations of Communication.....3 cr.
SPCH-COMM-202 Voice and Diction.....3 cr.

Two courses selected from the following:.....6 cr.
SPCH-COMM-201 Introduction to Semantics3 cr.
SPCH-COMM-215 Group Discussion.....3 cr.
SPCH-MASS-260 Basic Television Production3 cr.
SPCH-PATH-270 Introduction to the Field of
Communicative Disorders3 cr.
SPCH-PERF-130 Introduction to Theatre3 cr.
SPCH-PERF-255 Oral Interpretation of
Literature.....3 cr.
Electives in speech or performing arts6 cr.
Total 18 cr.

GRADUATE PROGRAM

Master of Arts in Speech

An in-depth study of speech research and the principles and practice of speech and the performing arts, this program is designed for teachers of speech at the secondary level, elementary school teachers, candidates for teaching positions in higher education, students interested in positions in business and industry, and as a preparation for further graduate study.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Applicants are required to have completed 15 undergraduate credit hours in speech and/or performing art courses at an accredited institution of higher education. Students who do not meet this requirement may be admitted to the program conditionally. Such students must satisfy this requirement prior to being admitted to degree candidacy.

Requirements for the Degree:

30 credit hours planned in consultation with a faculty advisor. A maximum of six hours in cognate areas may be included in the program with the approval of the graduate faculty committee of the Department of Speech and Performing Arts.

Required Courses:

SPCH-COMM-401 Introduction to Graduate Study
in Speech3 cr.
SPCH-COMM-404 Communication Theory.....3 cr.
SPCH-PERF-430 Dramatic Theory3 cr.
Electives selected from 400-level courses in
Speech and Performing Arts9 cr.
Electives selected from courses in Speech and
Performing Arts at either the 400 or
300-level12 cr.
Total 30 cr.

Students choose either the thesis or the non-thesis option. Students who do not write a thesis must place in the departmental library three finished term papers researched in 400-level courses as evidence of scholarly writing ability.

Theses must meet with the approval of the appropriate graduate committee. Students should enroll in SPCH-499, Thesis Seminar: Speech (6 cr.) while they write their thesis. The course counts towards the requirement of 400-level electives. Students may enroll one time only.

All degree candidates must pass a comprehensive written examination and, at the discretion of the graduate committee, an oral examination covering their areas of specialization. Students who choose to write a thesis must pass an oral examination on topics included in their thesis.

For further information, contact the departmental advisor for graduate study.

COURSE OFFERINGS

SPCH-499 Thesis Seminar: Speech, 6 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts degree in Speech and the Performing Arts. *Prereq.: acceptance to master's degree candidacy in speech and approval of graduate advisor.*

Communications

SPCH-COMM-100 Introduction to Communication, 3 cr. The study of human communication with emphasis on

how we communicate, the factors that influence the success of our communication interactions, and the areas in which communication takes place.

SPCH-COMM-101 Foundations of Communication, 3 cr. The development of skills common to all forms of oral communication with emphasis on public speaking. Students will study organization, delivery, sources of materials, and language usage. Some attention to interviewing and interpersonal communication skills.

SPCH-COMM-201 Introduction to Semantics, 3 cr. The study of words and symbols and the way people respond to them. A pragmatic examination of the way in which language, thought, and behavior interrelate.

SPCH-COMM-202 Voice and Diction, 3 cr. Emphasis on improving voice quality, volume, projection, rate, articulation, and pronunciation.

SPCH-COMM-203 Articulation and Pronunciation, 3 cr. An advanced diction course dealing with the precise production of oral American English in everyday and formal speech with emphasis on a high accuracy in general enunciation. *Prereq.: SPCH-COMM-202 or consent of instructor.*

SPCH-COMM-205 Debate Laboratory, 1 cr. Investigation and analysis of the current intercollegiate debate proposition. Instruction in basic techniques of public policy analysis.

SPCH-COMM-206 Individual Events Laboratory, 1 cr. Open to all students who wish to participate in intercollegiate forensic events including public speaking, interpretation, and model United Nations experiences.

SPCH-COMM-210 Public Speaking, 3 cr. Continuation of SPCH-COMM-101 with additional experiences in various types of public speaking. Students will videotape selected talks. Instruction in speech criticism. *Prereq.: SPCH-COMM-101.*

SPCH-COMM-211 Argument Theory and Practice, 3 cr. Study of the structure of argument, facilities of reasoning, and evidence. Practice in argumentation in small group, interpersonal, and public settings. *Prereq.: SPCH-COMM-101 or SPCH-COMM-215.*

SPCH-COMM-213 Interpersonal Communication, 3 cr. Study of how humans interact through the use of verbal and non-verbal symbols. Through participation and involvement, students explore communication as a process and examine messages, meanings, feedback, non-verbal elements, attention, listening, barriers and breakdowns as they affect communication.

SPCH-COMM-214 Business and Professional Communication, 3 cr. Development of oral communication skills necessary for students entering organizations and businesses. Small group problem-solving and information-sharing discussion techniques; listening; superior-subordinate communication; interview skills; informative briefing skills; persuasive proposal skills.

SPCH-COMM-215 Group Discussion, 3 cr. In-depth study of discussion as a tool of group problem-solving. Extensive participation in small-group experience.

SPCH-COMM-301 Experiences in Non-Verbal Communication, 3 cr. Experiencing, analyzing, and evaluating non-verbal messages in experimental communication situations.

SPCH-COMM-306 Studies in Speech, 3 cr. Group study of a selected topic in the field of speech under the guidance of a staff member who specializes in the topic. Consult the Schedule of Classes for specific topics. *Prereq.: consent of instructor.*

SPCH-COMM-308 Independent Study in Speech, 3 cr. Individual investigation into a topic of the student's choice.

Prereq.: consent of instructor.

SPCH-COMM-310 Persuasion, 3 cr. Contemporary theories and practices of persuasion; practice in preparing and judging persuasive messages. Analysis and evaluation of persuasive messages in society from the used car lot to the grocery store. *Prereq.: SPCH-COMM-101 or equivalent.*

SPCH-COMM-313 Sex Differences in Communication, 3 cr. Investigation of the effects of sex role on communication behaviors, such as naming behavior, language acquisition, professional orientation, conflict management, self-image, dress and social roles. *Prereq.: consent of instructor.*

SPCH-COMM-314 Organizational Communication, 3 cr. Evaluation of organizational communication climate and information flow-network analysis. Implementation of field research methodology to assess the communication practices of an organization.

SPCH-COMM-315 Group Leadership, 3 cr. Theory and practice of the social-emotional and task-related aspects of small group leadership. Reading of standard works from the field of group dynamics. *Prereq.: SPCH-COMM-215.*

SPCH-COMM-316 Family Communication, 3 cr. Study of the family as a system with an examination of the role played by communication; the function of family roles, rules and power and how they operate to increase or decrease communication effectiveness in this system.

SPCH-COMM-318 Communication Consulting, 3 cr. Examination of requirements, procedures, communication topic areas and levels of expertise needed for communication consulting with businesses, professional associations and governmental agencies. *Prereq.: SPCH-COMM-214.*

SPCH-COMM-322 Modern Rhetoric, 3 cr. Rhetorical theories from the modern era with attention to principal figures. *Prereq.: junior standing or consent of instructor.*

SPCH-COMM-323 Controversy and Reaction in the British Tradition, 3 cr. Study of major intellectual and moral trends in British public and parliamentary debate from the mid-nineteenth century to the present day concentrating on imperialism, parliamentary reform, economic and social change, and religious and political liberty.

SPCH-COMM-324 Rebels and Reformers in American Thought, 3 cr. Study of the speakers who through public communication had an impact on the course of American history from the colonial period to the present, such as Jonathan Edwards, Patrick Henry, Wendell Phillips, Robert Ingersoll, Angelina Grimke, William Lloyd Garrison, Cary Nation, Eugene V. Debs, Harry Truman, and Martin Luther King.

SPCH-COMM-383 Professional Internship I, 3 cr. Professional activities in a selected field of communication, media or theatre, performed and supervised at public or

private facilities, corporate communication sites, businesses, agencies, theatres, etc. Application must be made to the department chair in advance in order to facilitate the preparation of the resume, site visits, and interviews necessary for satisfactory placement.

SPCH-COMM-384 Professional Internship II, 6 cr. (See SPCH-COMM-383 for description.)

SPCH-COMM-385 Professional Internship III, 9 cr. (See SPCH-COMM-383 for description.)

SPCH-COMM-401 Introduction to Graduate Study in Speech, 3 cr. Problems, methods and resources involved in graduate study ad research in all areas of speech. *Prereq.: graduate standing and 12 credit hours in speech.*

SPCH-COMM-404 Communication Theory, 3 cr. An analysis of communication theories and models to determine the nature and role of communication as a behavioral process in interpersonal relations, in groups, and in mass media.

Prereq.: graduate standing, six upper division credit hours in speech or language arts, or consent of instructor.

SPCH-COMM-414 Organizational Communication Theory, 3 cr. This course will provide an advanced look at the major elements of organizational theory which apply to organizational communication. This field, in a modern sense, began in the 1950's and since then has grown to be one of the biggest forces in speech communication today. We will examine what theories direct the reality of organizations and how much of that reality is managed for the purposes of controlling individuals, whether overtly or symbolically.

SPCH-COMM-418 Seminar—Research Problems in Group Communication, 3 cr. Review of research scholarship in group communication; completion of an original research study. *Prereq.: graduate standing and six graduate credit hours in speech.*

SPCH-COMM-428 Seminar—Research Problems in the Psychology of Communication, 3 cr. Review of research scholarship in the psychology of communication including a study of the nature of attention, emotion, motivation, and psycholinguistics; completion of an original research study. *Prereq.: graduate standing and six graduate credit hours in speech.*

SPCH-COMM-434 Independent Study in Communication, 3 cr. Individual investigation into selected topics in theory and practice of speech communication. *Prereq.: graduate standing and consent of instructor.*

Education

SPCH-ED-391 Directing Forensics, 3 cr. Practical preparation for those interested in coaching debate and individual events at the middle school, high school, or at the college level; program philosophies, tournament management, and coaching techniques.

SPCH-ED-490 Specialized Problems in Speaking and Listening, 3 cr. Selected topics in methods and materials related to speaking and listening; instructional problems relative to type of programs, trends in instruction, sources, resources and research. Individual projects will adapt resources and methodology to a particular type of school and classroom, such as inner city. *Prereq.: graduate standing.*

SPCH-ED-492 The Teaching of College Speech, 3 cr. Study of the tasks of the college speech teacher; philosophy, objectives, materials and methods of instruction, speech curricula and departmental operations; professional interrelationships in the community. *Prereq.: graduate standing and six credit hours in speech.*

Mass Media

SPCH-MASS-160 The Art of Film and Video, 3 cr. Introduction to the creative foundations of film and video art by analyzing the way sight, sound, and motion are used to communicate ideas and emotions; lecture, demonstration, screening, discussion.

SPCH-MASS-165 The Business of Broadcast Media, 3 cr. Introduction to the business and creative processes, structure and function of American television and radio emphasizing the production, distribution and reception of news and information programming.

SPCH-MASS-208 Media Laboratory, 1 cr. Participation in various phases of production and management for either on-campus or off-campus radio, television, or film activities.

Prereq.: written consent of instructor.

SPCH-MASS-260 Basic Television Production, 3 cr. Analysis of the media, modes, materials, and techniques used for various program types, with special consideration of their utilization and artistry. Study tours, demonstrations and studio portable television production.

SPCH-MASS-265 Mass Media and Society, 3 cr. Development and problems of the mass media; the history, regulation, and social and economic implications of the public arts; American systems and their relation to the media's cultural content and function.

SPCH-MASS-360 Advanced Television Production, 3 cr. Conception and execution of a variety of TV programs; closed and open circuit; technical production of documentary, instructional, and dramatic programs. *Prereq.: SPCH-MASS-260.*

SPCH-MASS-363 Documentary Film, 3 cr. Historical survey of the international non-fiction film, including creative films, anthropological films, and television journalistic documentaries.

SPCH-MASS-365 Contemporary Issues in Mass Media, 3 cr. Advanced study of the socio-psychological impact of the mass media upon contemporary society. *Prereq.: SPCH-MASS-265.*

SPCH-MASS-366 Creative Writing for Mass Media, 3 cr. Study of writing for the various media with practice in the creation of original works; experience in writing forms and content typical of the various media and criteria for evaluating written work; discussion of career opportunities.

Pathology

SPCH-PATH-270 Introduction to the Field of Communicative Disorders, 3 cr. Survey of the field of speech pathology, audiology, and speech science.

SPCH-PATH-371 Speech and Hearing: The Physical Structural Determinants, 3 cr. Study of the anatomical structure and functions of the speech and hearing mecha-

nisms in acts of respiration, phonation, resonance, articulation, auditory perception and language formulation. *Prereq.: SPCH-PATH-270.*

SPCH-PATH-372 Speech and Hearing: Developmental Determinants, 3 cr. Speech, hearing, thought and communication functions from development and integration in infancy through decline and disintegration in old age. Implications of development and decline for speech and language pathology. *Prereq.: SPCH-PATH-270.*

SPCH-PATH-373 Speech and Hearing: Social-Psychological Determinants, 3 cr. Normal social and psychological structures underlying the functions of speech, hearing and communication; influence of social and psychological pathology on speech and language; somatopsychology of individuals with normal and pathological speech and hearing. *Prereq.: SPCH-PATH-270.*

Performance

SPCH-PERF-130 Introduction to Theatre, 3 cr. Survey of the components of the theatrical experience and the function of the various contributors to the theatrical production. Attendance at selected theatrical productions is required.

SPCH-PERF-139 Theatre Practicum I, 1 cr. Open to all students who participate in a departmental stage offering.

Prereq.: a cumulative grade point average of 3.00 or better (except 1st trimester freshmen).

SPCH-PERF-207 Interpreters' Laboratory, 1 cr. Participation in oral interpretation activities at local, regional, or national levels. *Prereq.: SPCH-PERF-255 or written consent of instructor.*

SPCH-PERF-236 American Musical Theatre, 3 cr. Survey of the development of the American musical theatre with consideration of the problems inherent in the production of musicals.

SPCH-PERF-239 Theatre Practicum II, 2 cr. Open to all students who participate in departmental stage offerings.

Prereq.: a cumulative grade point average of 3.00 or better and SPCH-PERF-139.

SPCH-PERF-240 Technical Production A, 3 cr. An introduction to the geography of the stage, its machinery and materials, concepts of planning, organization and management for theatrical production.

SPCH-PERF-241 Technical Production B, 3 cr. An introduction to the geography of the stage, its machinery and materials, concepts of planning, organization and management for theatrical production.

SPCH-PERF-245 Acting I, 3 cr. The basic skills of acting including the actor's internal preparation for playing a role and the development of his/her external technique for projecting the role to the audience.

SPCH-PERF-246 Acting II, 3 cr. Refinement of skills developed in Acting I with emphasis on the use of improvisation to develop and project characters from standard plays.

Prereq.: SPCH-PERF-245 or equivalent.

SPCH-PERF-249 Make-up, 3 cr. Fundamentals of stage and television make-up for straight and character roles; emphasis on the application of make-up, historical periods and uses of masks are also considered.

SPCH-PERF-255 Oral Interpretation of Literature, 3 cr. Development of intellectual and emotional responsiveness to prose, poetry, and drama, and the ability to communicate effectively in performance.

SPCH-PERF-309 Independent Study in Theatre Arts, 3 cr. Individual investigation into a topic of the student's choice. *Prereq.: consent of instructor.*

SPCH-PERF-330 Frontier Theatre, 3 cr. The history and development of the American Theatre from its beginning through 1905 with emphasis on the actors and actresses, the native American plays, the theatres of the era, the social customs that produced the theatrical environment and consideration of the related forms of American entertainment: showboats, minstrel shows, the traveling tent circus, and vaudeville.

SPCH-PERF-331 History of Theatre to 1600, 3 cr. Chronological survey of the development of theatre and drama of the Western World from the early Greek festivals to the Elizabethan Theatre.

SPCH-PERF-332 History of Theatre: 1600-1900, 3 cr. Chronological survey of the development of theatre and drama of the Western World from the Renaissance to the Twentieth Century.

SPCH-PERF-333 Contemporary Theatre, 3 cr. Survey of theatre and drama of the Twentieth Century. *Prereq.: SPCH-PERF-130.*

SPCH-PERF-334 Drama, 3 cr. In-depth study of the major works of a single dramatist or movement, the relationship of those works to the period in which they were produced, and their place in history of dramatic literature. Consult the schedule of classes for specific topics. *Prereq.: SPCH-PERF-130.*

SPCH-PERF-339 Theatre Practicum III, 3 cr. Open to all students who participate in departmental stage offerings.

Prereq.: a cumulative grade point average of 3.00 or better and SPCH-PERF-239.

SPCH-PERF-340 Scenographic Design, 3 cr. Comprehensive, two trimester course in aesthetics and principles of scene design, costume design and stage lighting. Theory and practical application. *Prereq.: SPCH-PERF-240.*

SPCH-PERF-341 Scenographic Design, 3 cr. (See SPCH-PERF-340 for description.) *Prereq.: SPCH-PERF-340.*

SPCH-PERF-345 Directing, 3 cr. Principles and techniques of the director's art. *Prereq.: SPCH-PERF-240 and SPCH-PERF-245.*

SPCH-PERF-347 Playwriting, 3 cr. Study of dramatic art with practice in the writing of plays for dramatic production. An attempt will be made to provide laboratory productions of outstanding student works. *Prereq.: consent of instructor.*

SPCH-PERF-348 Children's Theatre Workshop, 3 cr. Survey of theatre for children from creative dramatics to theatre in the secondary schools. All significant facets of play production are covered.

SPCH-PERF-349 Summer Theatre, 3 cr. A laboratory class covering phases of musical theatre production in conjunction with the production of a musical. Includes acting, directing, set and costume design, choreography, lighting, props, publicity, theatre management as related to musical theatre.

SPCH-PERF-352 Interpretation of Poetry, 3 cr. Literary analysis and oral performance of lyric, narrative, dramatic poetry, and other presentational forms. *Prereq.: SPCH-PERF-255.*

SPCH-PERF-353 Interpretation of Prose, 3 cr. Literary analysis and oral performance of both fiction and non-fiction, including novels, short stories, essays, letters, diaries, travel literature, and biographies. *Prereq.: SPCH-PERF-255.*

SPCH-PERF-354 Interpretation of Drama, 3 cr. Literary analysis and performance of plays, emphasizing the solo reader performing a variety of roles. *Prereq.: SPCH-PERF-255 and consent of instructor.*

SPCH-PERF-355 Advanced Oral Interpretation, 3 cr. Literary analysis of poetry and prose; presentation of individual and multiple performers. *Prereq.: SPCH-PERF-255.*

SPCH-PERF-357 Oral Interpretation of Shakespeare, 3 cr. Selected comedies, tragedies and histories, tracing the development of the dramatist; emphasis on special performance techniques to illuminate a thorough study of the plays. *Prereq.: SPCH-PERF-255.*

SPCH-PERF-359 Ensemble Interpretation, 3 cr. Theory and practice of oral interpretation by groups including choric readings, reader's theatre, and chamber theatre. *Prereq.: SPCH-PERF-255.*

SPCH-PERF-393 Creative Dramatics, 3 cr. Development of leadership in conducting creative dramatic programs to serve the needs of children from grades one through twelve.

SPCH-PERF-423 Independent Study in Performing Arts, 3 cr. Individual investigation into selected topics in methods and materials for dramatic activities. *Prereq.: graduate standing and consent of instructor.*

SPCH-PERF-430 Dramatic Theory, 3 cr. Analysis of major theories of dramatic writing and dramatic production from Aristotle to Antonin Artaud and their influence upon theatre and drama. *Prereq.: graduate standing and nine credit hours in performing arts or dramatic literature at the graduate or undergraduate levels.*

SPCH-PERF-431 Comparative Performing Arts, 3 cr. Comparison and contrast of the various performing arts such as ballet, opera, drama, film and television as they present specific works. Attendance at performances required. *Prereq.: graduate standing and nine credit hours in performing arts.*

SPCH-PERF-432 Aesthetics of Theatre Production, 1 cr. A consideration of the production elements of acting, directing and design as they illuminate the script. Emphasis will be on criticism of productions of new scripts.

SPCH-PERF-438 Seminar—Research Problems in Performing Arts, 3 cr. Review of recent scholarship in the performing arts; completion of an original research study. *Prereq.: graduate standing and six graduate credit hours in speech.*

SPCH-PERF-446 Theatre Management, 3 cr. Managerial policies and practices in educational and community theatres with emphasis upon common problems and their solution. *Prereq.: graduate standing, nine credit hours in performing arts, or consent of instructor.*

SPCH-PERF-458 Seminar—Research in Interpretative Arts, 3 cr. Review of research scholarship in the interpretative arts; completion of an original study. *Prereq.: graduate standing and six graduate credit hours in speech.*

WOMEN'S STUDIES PROGRAM

The Women's Studies Program (WSP) is an interdisciplinary program concerned with critically re-examining the traditional body of knowledge about women and their various roles in society from a feminist perspective. The Women's Studies Program at Northeastern Illinois University began in 1971, and the official interdisciplinary Women's Studies Minor (described below) was approved in 1977. Originally a part of the Center for Program Development, it is presently under the College of Arts and Sciences. There is currently no major offered in Women's Studies, but it is possible for an undergraduate to construct a major through the Kaskaskia Plan or to arrange an area of concentration in Women's Studies through the University Without Walls program. Many different graduate courses in Women's Studies are offered through several departments including English, History, Political Science, and Sociology.

The Women's Studies Program operates a Resource Center, located in A-108, which is staffed by volunteers and a student aide. The Center houses a Women's Studies library of books, periodicals, and recent clippings and articles. It is a drop-in Center where students, faculty, and staff can gather in a more informal setting. Call 583-4050, extension 3308, for current hours. WSP sponsors speakers, films, informal Brown Bag Seminars, and evening Feminist Study Groups on a variety of issues of interest to women and also publishes, on a trimesterly basis, a newsletter, *PROGRAM NOTES*.

Minor in Women's Studies (21 cr. hrs.)

The Women's Studies minor requires completion of 21 credit hours of women's studies courses from at least two academic departments. The courses must include (1) either "Introduction to Women's Studies," offered by WSP each fall, or "American Women, The Changing Image," a regularly offered sociology course, and (2) "Seminar in Women's Studies," offered by WSP each spring. The program coordinator serves as advisor for students choosing the Women's Studies minor.

Women's Studies Courses

Anthropology

ANTH-307 The Role of Women in Different Cultures

Art

ART-302F Studies in Art History: Women Artists

ART-303 Images of Woman in Art

Business and Management

MNGT-378 The Changing Role of Women in Business

Criminal Justice

CRJU-311 Women, Crime, and the Criminal Justice System

CRJU-315A Proseminar: Women, Resistance, and

World War II

CRJU-315Q Women's Ethics, Patriarchal Justice

- CRJU-315X Proseminar: Women as Political Prisoners II
 CRJU-3158 Proseminar: Women and the Law
 CRJU-321 Women's Advocacy: Rape and Womenabuse
 CRJU-324 Women as Political Prisoners
 CRJU-325 Women and Revolution: Theories of Justice

Curriculum and Instruction

- C&I-ECED-336 Non-Sexist Strategies for Parents and Teachers of Young Children

Educational Foundations

- EDFN-325 Changing Role of Women in American Education

English

- ENGL-302 Love in Western Literature
 ENGL-318Z Readings in American Literature: Women's Poetry, Women's Lives
 ENGL-358A Readings in British Literature: Women Writers
 ENGL-371 Studies in Women's Literature
 ENGL-444G Seminar in Romantic Literature: Jane Austen

Geography and Environmental Studies

- G&ES-304 Women's Place and Space

Health, Physical Education, Recreation, and Athletics

- HPER-PEMT-342B Pro-Seminar in HPER: Women and Health Care
 HPER-PEMT-342J Pro-Seminar in HPER: Women in Sports

History

- HIST-200W Love, Marriage and the Family in History
 HIST-315 Women in Medieval Society
 HIST-338 Women in American History
 HIST-349 Women in Popular Culture
 HIST-410 Readings in Medieval Women's History
 HIST-436 Readings in Women's History of the U.S.
 HIST-446 Seminar in Women's History of the U.S.
 HIST-461 Readings in the History of Women in Japan

Philosophy

- PHIL-105 Feminist Philosophy
 PHIL-291 Philosophical Foundations of Oppression
 PHIL-351 Sexism and the Philosophy of Language
 PHIL-353 Feminism and the Philosophy of Science
 PHIL-373 Advanced Feminist Philosophy

Political Science

- PSCI-AMER-3213 Pro-Seminar in American Political Process: Poverty, Racism and Sexism in Urban Areas
 PSCI-AMER-321W Impact of Public Policy on Women
 PSCI-COMP-340A The Politics of Puerto Rican Women
 PSCI-COMP-390 Gender and Politics
 PSCI-PA-325A Women in Public Administration

- PSCI-THRY-379 Law and Social Change
 PSCI-THRY-416A Seminar in Selected Problems: Feminist Political Thought

COURSE OFFERINGS

Program for Interdisciplinary Education

PIE—SEM-383L Women's Bodies and Beauty: Social Messages and Personal Reality, 3 cr. An examination of the contradictory social messages and diverse personal realities of women's bodies and beauty in American culture, across racial, ethnic, age, sexual orientation, and able-ness categories.

Psychology

- PSYC-304B Women and Mental Health
 PSYC-315 Psychological Development in Women
 PSYC-320 Psychosexual Development

Sociology

- SOC-105# Women, Men, and Social Change
 SOC-214 Sociology of Marriage and the Family
 SOC-270 Social and Economic Issues Confronting Latina Women
 SOC-306 American Women: The Changing Image
 SOC-318 Socialization Processes
 SOC-320A Topics in Sex and Gender: Issues in Reproduction
 SOC-320B Topics: Dual-Career Marriage
 SOC-329 Sociology of Violence
 SOC-340 Sociology of Sexuality
 SOC-344 Proseminar: Sociological Portrait of the Black Woman
 SOC-347 Sociology of Media
 SOC-376 Sociology of Working Women
 SOC-404B Seminar: Sex, Race and Class
 SOC-404L Seminar: Feminist Sociology

Speech and Performing Arts

- SPCH-COMM-316 Family Communication

COURSE OFFERINGS

Women's Studies Program

WSP-101 Introduction to Women's Studies, 3 cr. The objectives of this course are to gain a greater understanding of the philosophical basis of patriarchy, to analyze the impact of gender on the personal lives of women, and to examine the significance of the womanist/feminist perspective in Women's Studies. Open to all women and men. Required for the Women's Studies minor. Fulfills the general education requirements for 3 hours of interdisciplinary/professional studies.
WSP-150 Model Mugging: Self-Defense and Empowerment for Women, 1 cr. This five-see, one credit-hour course is a highly specialized self-defense course in which women learn a knockout defense against an assailant

of any size. The course is unique in its use of a specially trained, heavily padded assailant (the model mugger). With the support of other students and female instructors, students learn to use real, full-force against the padded mugger in simulated rape scenarios. Special fees. *Prereq.*: consent of the instructor.

WSP-283 Assertiveness Training for Women, 3 cr. The purpose of the course is to assist women in finding effective alternatives for the solutions of many familiar problems. It is designed to teach women how to handle themselves and their situations in an assertive manner. Women who have difficulty expressing both their positive and negative feelings, or who experience anxiety when asserting their rights can benefit from this course.

WSP-321 Internship in Women's Studies, 1 cr. Placement in a university or community office that provides concrete services to women. This will be an opportunity to test classroom concepts in a field setting. *Prereq.*: permission of the Women's Studies coordinator.

WSP-322 Internship in Women's Studies, 2 cr. (See description for WSP-321.)

WSP-323 Internship in Women's Studies, 3 cr. (See description for WSP-321.)

WSP-331 Independent Study in Women's Studies, 1 cr. An intensive investigation of a special area of women's studies. *Prereq.*: permission of the Women's Studies coordinator.

WSP-332 Independent Study in Women's Studies, 2 cr. (See description for WSP-331.)

WSP-333 Independent Study in Women's Studies, 3 cr. (See description for WSP-331.)

WSP-350 Seminar in Women's Studies, 3 cr. This interdisciplinary seminar builds on knowledge gained in other Women's Studies classes. Research will focus on a different topic each year. Topics may include women and health, feminist research and theory, international women's movements, Latin American feminism, and others. Consent of the instructor is necessary. This course is a requirement for students completing the Women's Studies Minor and is eligible for graduate credit as well.

Women's Studies Core Faculty

- Shelley A. Bannister, M.A., J.D., Assistant Professor, Criminal Justice and Women's Studies
 Debra Bruce, M.F.A., M.A., Assistant Professor, English and Women's Studies

- Irene Campos Carr, M.S., Coordinator, Women's Studies Program and Women's Studies Faculty.
 Ellen Cannon, Ph.D., Professor, Political Science and Women's Studies
 Shirley Castelnovo, Ph.D., Professor, Political Science and Women's Studies
 Merrie Cutts, M.F.A., Assistant Professor, Art and Women's Studies
 Valli Furan, M.A., Acting Director, BOG/BA Degree Program and Women's Studies Faculty
 Renny Golden, D.Min., Associate Professor, Criminal Justice and Women's Studies
 Nancy Green, Ph.D., Professor, Educational Foundations and Women's Studies
 Jacqueline Harper, M.A., Director of Women's Services and Re-Entry Programs, and Women's Studies Faculty
 Jane Hawley, Ph.D., Professor, Counselor Education and Women's Studies
 Sarah Hoagland, Ph.D., Associate Professor, Philosophy and Women's Studies
 Demetria Iazzetto, Ph.D., Assistant Coordinator, University Without Walls Program and Women's Studies Faculty
 Ayana Karanja, Ph.D., Associate Director, Center for Inner City Studies and Women's Studies Faculty
 Dorothe Rigby, Ph.D., Associate Professor, Psychology and Women's Studies
 Yolanda Santiago-Nieves, M.A., Women's Studies Faculty
 Mary Ann Schwartz, Ph.D., Professor, Sociology and Women's Studies
 BarBara M. Scott, Ph.D., Assistant Professor, Sociology and Women's Studies
 Valerie Simms, Ph.D., Professor, Political Science and Women's Studies
 June Sochen, Ph.D., Professor, History and Women's Studies
 Sandra Styer, Ph.D., Professor, Curriculum and Instruction, Associate Dean, College of Education, and Women's Studies Faculty
 Martha Thompson, Ph.D., Professor, Sociology and Women's Studies
 Emily C. Wadsworth, Ph.D., Coordinator, Program for Interdisciplinary Education and Professional Development, and Women's Studies Faculty

COLLEGE OF BUSINESS AND MANAGEMENT

Olga E. Engelhardt, Ph.D., Professor of Management, Dean
Kathleen A. Carlson, Ph.D., Associate Professor of Management, Associate Dean

The College of Business and Management offers instructional programs which combine a liberal arts education with career preparation in Accounting, Finance, Management, Marketing, and General Business Administration. The five undergraduate degree programs prepare students for professional business careers and for additional study in graduate schools of business and management.

Students intending to major or minor in the College of Business and Management must also fulfill the University General Education program requirements by enrolling in mathematics, English, economics, fine arts, information science, natural science, humanities and other courses which stress written and oral communication skills.

The overall goal of the College of Business and Management is to offer high quality instruction suited to student needs and interests, job market trends, and available resources. The College of Business and Management adheres to the quality standards established by the American Assembly of Collegiate Schools of Business (AACSB). Specific objectives are:

1. To provide a well-rounded undergraduate education for students pursuing careers in various fields of business. Inherent in this objective is the successful completion of the University's General Education program and careful attention to the selection of elective courses.

2. To maintain curricula which are current, comprehensive and cognizant of students' educational needs relative to employment opportunities.

Five separate undergraduate degrees are offered by the College of Business and Management:

- B.S. in Accounting
- B.S. in Finance
- B.S. in General Business Administration
- B.S. in Marketing
- B.S. in Management

For students who are completing a B.A. or a B.S. degree in a non-business field, the College of Business and Management also offers the opportunity to complete a "second major" program in General Business Administration.

In addition to the above, six minors are available which provide students with explorations into a second career and/or a concentration of courses which support and expand their major. The six minors are:

- Accounting
- Business Law
- Finance
- Management
- Marketing
- International Business

The College of Business and Management is organized into three departments each headed by a chairperson:

- Department of Accounting, Business Law and Finance
- Department of Marketing
- Department of Management

Students majoring in programs offered through the College of Business and Management must complete the following:

1. the University General Education program requirements explained elsewhere in this catalog;
2. all business and management requirements for declaring a major;
3. the business and management "core curriculum";

4. the specific business courses required for the major selected by the student.

Students who major in business are **not** required to complete a minor.

CREDIT HOUR GUIDELINES FOR TAKING BUSINESS AND MANAGEMENT COURSES

Students must have completed the following undergraduate hours (including transfer hours) before registering for Business and Management courses:

1. a minimum of 30 hours completed to take all 200-level Business and Management courses.
2. a minimum of 60 hours completed to take all 300-level Business and Management courses.

Business majors and non-Business majors must have the approval of the program advisors to register for any 300-level Business and Management course.

The departments of Marketing, and Accounting, Business Law and Finance do not give "R" grades. Students who do not follow the proper procedures for dropping a course will receive an "F" for the course. This requirement will be strictly enforced and the student will be asked to show proof (grade report/transcripts) before registering for Business and Management courses or at any time during the term.

The departments of Management, Marketing, and Accounting, Business Law and Finance have an Academic Misconduct Policy. Copies are available for review in the Office of Program Advisement, Room 0028.

DECLARATION OF MAJORS FOR THE PROGRAMS IN BUSINESS AND MANAGEMENT

The requirements listed below must be met before a student can officially declare a major in the College of Business and Management. It is necessary to see the Program Advisors in order to complete the major declaration form. A student must bring grade reports and/or transfer evaluations to show completion of the declaration requirements.

1. Have a 2.5 (on a 4.0 scale) grade point average and 45 hours completed.
2. Pass ENGL-101 or ENGL-102 with a grade of "B" or better, or pass the English Language Competence Examination.
3. Pass ABF-ACTG-201 (Accounting I), or equivalent course with a grade of "C" or better.

Pre-calculus Math (Math 106) was a requirement for graduation for all Business and Management majors (with a grade of "C" or better) for students who matriculated on or after September 1, 1988.

Students who have **not** taken Math 106 before Fall 1990, will fulfill the requirement by enrolling in Business Calculus (Math 111) and earning a grade of "C" or better. As of Fall 1990, Math 111 will be taken **in place of** Math 106. Finite Math (Math 110) is a prerequisite for Math 111 and cannot

be taken concurrently. **Also effective Fall 1990, Business Calculus (Math 111) is the prerequisite for entry into the following courses. ACTG 201, FINA 360, MNGT 368, MNGT 377, and MNGT 379.**

For transfer students, the equivalent courses (effective 1990) will be calculus (or a higher level calculus course) with a grade of "C" or better. Please see the Program Advisors for the determination of equivalency.

The courses below must be taken in the following sequence (and must not be taken concurrently).

MATH-102 (Intermediate Algebra) with a grade of "C" or better, or appropriate score on the math placement test.

MATH-110 (Finite Math) with a grade of "B" or better.

MATH-111* (Business Calculus) with a grade of "C" or better.

MNGT-368* (Quantitative Methods for Managerial Decision Making) or MATH-273 (Statistics with Applications) or ECON-220 (Business and Economic Statistics) is required with a grade of "B" or better or a grade of "C" in combination with passing the statistics competency exam.

*Both courses are required to graduate with a Business degree.

Students who declared a major in the College of Business and Management before **January 1, 1987** were not subject to the new requirements. As of **January 1, 1987**, all new and transfer students must adhere to the new curriculum in the College.

DECLARATION OF MINORS IN BUSINESS AND MANAGEMENT

1. Students must consult the Program Advisor and complete a declaration of minor form.
2. The following requirements must be met to declare a business and management minor:
 - a. Forty five credit hours completed;
 - b. A grade of "B" or better in ENGL-101 or ENGL-102, or a passing score on the English Competence Examination;
 - c. A grade of "B" or "A" in MATH-110 (Finite Math) or a grade of "C" in combination with passing the Finite Math Competency Examination, or a grade of "C" or better in MATH-111 (Business Calculus).

SUMMARY OF BUSINESS AND MANAGEMENT POLICIES

Graduation Requirement:

Students who matriculate on or after September 1, 1989 are required to have a minimum cumulative grade point average of 2.5 (on a 4.0 scale) as well as a 2.5 grade point average in the major, in order to graduate in the College of Business and Management.

Statistics Requirement:

All Business and Management majors must complete MNGT-368 or MATH-273 or ECON-220 with a grade of "B" or better to meet the statistics core requirement for their majors. Students who earn a grade of "C" must take and pass the Statistics Competency Examination administered by the College of Business and Management before the course will be accepted toward the major. Statistics courses completed with grades of "D" or "F" cannot be counted toward the major.

Transfer students majoring in Business and Management must take MNGT-368 or MATH-273 or ECON-220 at Northeastern if the prior statistics course taken at another institution does not transfer as equivalent.

Courses Applied to More than One Major:

Students enrolled in the College of Business and Management may use credit earned in Economics 215, 217 and MATH-273 for their Business and Management major or minor, and count the credit from Economics 215, 217 and MATH-273 toward meeting General Education requirements. However, the course credit may only be counted once toward graduation.

NOTE: Students majoring in one area of business (Accounting, Finance, Marketing or Management) and minoring in another, or majoring in more than one area, may **not** count the same course credit toward fulfilling major requirements in both programs. In cases where the course is required by both programs, the student must select a substitute course in the College of Business and Management with the approval of the chairperson of the major or minor department. This applies to all Business degrees.

NOTE: Business and Management majors who wish to complete a double major in the College of Business and Management must take **30** additional credits beyond the course work required in the first major to be distributed as follows: 21 credits in a second major discipline and 9 elective credits in courses offered by the College of Business and Management.

Transfer Credits from Other Institutions:

Northeastern Illinois University accepts transfer credits from accredited colleges and universities in accordance with articulation agreements with these institutions. The maximum number of transfer credits in business from accredited colleges and universities which can be applied toward majors in the Business and Management programs are:

B.S. degree programs in Accounting, Finance, Marketing and Management: 24 transfer credits (8 courses)

B.S. in General Business Administration for Second Majors: 15 transfer credits (5 courses)

B.S. in General Business Administration: 36 transfer credits (12 courses)

Minors: The College will accept a maximum of 9 transfer credit hours (3 courses) toward a minor.

NOTE: All transfer students must take a minimum of ten Business and Management courses at Northeastern.

Transfer students must see the Program Advisor to complete a major declaration form, and to verify which courses taken at other institutions will be accepted toward a Business and Management major and/or minor. To facilitate the evaluation of transfer course work it may be necessary for the student to provide course descriptions as listed in other college catalogs or course syllabi. When visiting the Program Advisor it is advisable to bring the transfer evaluation form provided by Northeastern's Office of Admissions and Records.

NOTE: Acceptance by Northeastern of transfer course work does **not** guarantee that the transferred courses will meet Business and Management program requirements. In general, advanced courses taken at accredited four-year colleges and universities are accepted toward the major in accordance with the College of Business and Management policies.

VALIDATION EXAMINATIONS

Principles of Marketing, Principles of Management, Principles of Finance, Cost Accounting, Intermediate Accounting I, Federal Income Taxes, Advertising, Auditing, (and some other upper division courses) taken at a community college level must be validated by examination in order to apply that course to the major. All other upper division courses taken at a community college may only be transferred as general elective credit. Accounting I and II, Business Law I and II, and Legal Environment of Business from a community college, if equivalent, are counted toward the core program. Validation examinations are offered four times per term. Students must produce evidence of having earned a grade of "C" or better in course(s) to be validated. Validation examinations may not be repeated before a period of six (6) months has elapsed. A student may take a validation examination for one subject three (3) times. If a student fails the validation examination for a subject three (3) times he/she must repeat the course. Students will receive a PASS or FAIL grade. Passing these exams demonstrates "B" competence. See the program advisors to arrange testing dates.

COMPETENCY EXAMINATIONS

The Statistics Competency Examination and the Finite Math Competency Examination can be **attempted a maximum of three times within a one-year period**. Students will receive a PASS or FAIL grade. Passing the exam demonstrates "B" competence. This policy is effective on or after September 1, 1988.

"D" and "P" Grades:

Courses with "D" and "P" grades taken in residency or accepted in transfer may **not** be applied toward any major or minor in Business and Management.

FILING FOR GRADUATION

To apply for graduation, the student must see the Program Advisor during the first two weeks of the appropriate term as indicated below:

NOTE: Students must be declared majors by the time they file for graduation.

GRADUATION GOAL	DEADLINE FOR FILING
April	Previous September 15th
June/August	Previous January 15th
December	Previous May 15th

When filing for graduation, students must bring grade reports or transcripts showing completion of appropriate required course work in business.

CORE COURSES FOR ALL BUSINESS AND MANAGEMENT DEGREE PROGRAMS

ABF-ACTG-201	Accounting I.....	3 cr.
ABF-ACTG-202	Accounting II.....	3 cr.
ABF-BLAW-285	Legal Environment of Business.....	3 cr.
ABF-350	Management Information Systems.....	3 cr.
ABF-FINA-360	Principles of Finance.....	3 cr.
MKTG-350	Principles of Marketing.....	3 cr.
MNGT-370	Principles of Management.....	3 cr.
MNGT-377	Production Management.....	3 cr.
MNGT-379	Operations Research.....	3 cr.
ECON-215	Principles of Macroeconomics.....	3 cr.
ECON-217	Principles of Microeconomics.....	3 cr.
MNGT-368	Quantitative Methods for Managerial Decision Making.....	3 cr.
		Total 36 cr.

GRADUATE PROGRAM

The graduate program provides individuals with a knowledge base in the area of business and management which will prepare them for mid-level positions in both the private and public sectors of the community. The MBA program offers a challenging, and practical orientation to the complexities of modern business management.

The primary objective of the Accounting concentration is to provide strong theoretical backgrounds in Financial and Managerial Accounting as well as Corporate and Personal Income Taxes. The Finance concentration provides a background in banking, options and futures trading as well as a solid knowledge of financial management and financial markets.

The objective of the Management concentration is to develop advanced skills and background in the strategic planning, project management, and direction of human resources in organizations. Upon completion of the program, students with a management specialization will have developed skills for planning, organizing, motivating, evaluating, controlling, and decision making, which are essential for success in today's business environment.

The main objective of the Marketing concentration is to develop advanced skills in marketing planning, marketing research, selling and buying, promotion and distribution. The

M.B.A. program will prepare students to meet the increasing demand for marketing personnel in the manufacturing, service, financial, institutional, and government fields.

Requirements for Admission to the Program

To be admitted applicants must have a minimum score of 450 or better on the GMAT; a Bachelor's degree from a four-year accredited institution with an overall grade point average of "B" or better.

In addition, students must have a basic competence in managerial computer science, and a basic understanding of the international component of business. These prerequisites will be fulfilled through the successful completion of appropriate introductory courses in information science at the undergraduate level, and of undergraduate courses in international finance, management, or marketing. Also, students with a non-business undergraduate major may be required to take certain undergraduate courses in business prior to their admission to the M.B.A. program. This is done on a case by case basis after careful scrutiny by the College of Business and Management's Admission Committee.

Requirements for the Degree

Option #1 16 courses (Total 48 credit hours)

Option #2 15 courses plus project or internship—3 credit hours (Total 48 credit hours)

Option #3 14 courses plus thesis—6 credit hours (Total 48 credit hours)

The M.B.A. curriculum consists of 11 fundamental core courses, 3 courses in a specialized area and 2 electives. Although students must complete the same set of core courses, students with prior education in business can waive up to 4 courses upon careful review and approval of the faculty advisor and approval of the Dean. A total of 48 credit hours will be required for graduation, 33 hours of core fundamentals, and 15 hours of specialization and electives. Four areas of specialization are offered: Accounting, Finance, Management, and Marketing. Students are advised to enroll in core courses first, followed by courses in specializations and electives. For further information, please contact the College of Business and Management at extension 5011.

CORE COURSES FOR THE MBA PROGRAM

ABF-ACTG-401	Financial Accounting.....	3 cr.
ABF-ACTG-402	Managerial Accounting.....	3 cr.
ABF-450	Management Information Systems.....	3 cr.
ABF-BLAW 485	Legal and Social Environment of Business and Management.....	3 cr.
ECON-419	Economic Analysis for Managers.....	3 cr.
ABF-FINA-460	Financial Management.....	3 cr.
MKTG-450	Strategic Marketing Management.....	3 cr.
MNGT-468	Quantitative Methods for Managerial Statistics.....	3 cr.
MNGT-471	Management Organizational Behavior.....	3 cr.
MNGT-477	Production and Operations Management.....	3 cr.
MNGT-550	Business Policy.....	3 cr.
		Total 33 cr.

DEPARTMENTS/ PROGRAMS

ACCOUNTING, BUSINESS LAW AND FINANCE

Yass Alkafaji, D.B.A., C.P.A., Associate Professor of Accounting

Nauzer Balsara, Ph.D., Associate Professor of Finance
Chong-Tong Chen, Ph.D., C.P.A., C.M.A., Associate Professor of Accounting, Chairperson

Ring Chen, Ph.D., C.P.A., Assistant Professor of Accounting
Ahmed El-Zayaty, Ph.D., Assistant Professor of Accounting
Kenneth Finkle, J.D., C.P.A., Associate Professor of Business Law

Donald Geren, M.B.A., C.P.A., Associate Professor of Accounting

Ruth Goran, M.S.A., C.P.A., Associate Professor of Accounting
Charas Kinkle, J.D., M.S.A., Associate Professor of Business Law and Accounting

Thomas Krissek, M.B.A., C.P.A., Assistant Professor of Accounting

Emmanuel Nyadroh, Ph.D., Assistant Professor of Accounting
Sevil Kutay, Ph.D., Assistant Professor of Finance
Mostafa Maksy, Ph.D., C.P.A., Associate Professor of Accounting

Phillip Neal, J.D., M.S.A., C.P.A., Assistant Professor of Accounting and Business Law

Emmanuel Nyadroh, Ph.D., Assistant Professor of Accounting
Narendar Rao, Ph.D., Assistant Professor of Finance
Rasoul Rezvanian, Ph.D., Assistant Professor of Finance
Myung-Ho Yoon, Ph.D., Assistant Professor of Accounting

Accounting is the language of business, and employees of small and large businesses must understand basic accounting principles. The knowledge of debits and credits, income statements and balance sheets is basic to all business activities. The goal of most accounting majors is to earn the C.P.A. designation. This professional certification enables an accountant to pursue many different career paths.

Finance is the study of value. It is based on the fundamentals of accounting and economics. The role of the finance professional is to determine the value of a stock, a new machine, a new product, or even an entire corporation. Clearly, any business executive who does not know value will have a limited career.

Chicago is the center for international finance. The world's principal commodities, futures and option exchanges are located here. They offer a variety of careers from runner to floor clerk to trader or broker. Since Chicago is an important headquarters city, there are many job opportunities related to financial analysis, capital budgeting and cash management.

The finance major has two emphases, financial management or financial markets. Course offerings center around both areas.

It is important to understand the legal implications of key business decisions, as business law constitutes the "rules of the game". Business Law courses offered at Northeastern are **not** a pre-law program and are not intended to be preparation for law school.

UNDERGRADUATE PROGRAMS

Major in Accounting for the Bachelor of Science Degree

Required Courses:

Business and Management Core Courses	36 cr.
*ABF-ACTG-301 Cost Accounting I	3 cr.
ABF-ACTG-307 Auditing Theory and Problems	3 cr.
*ABF-ACTG-310 Federal Income Taxes (Individual)	3 cr.
ABF-ACTG-321 Intermediate Financial Accounting I	3 cr.
*ABF-ACTG-322 Intermediate Financial Accounting II	3 cr.
*ABF-ACTG-324 Advanced Financial Accounting IV	3 cr.
*ABF-ACTG-325 Contemporary Financial Accounting Issues	3 cr.
ABF-BLAW-280 Business Law I	3 cr.
ABF-BLAW-281 Business Law II	3 cr.
MNGT-393 Business Policy	3 cr.
Total	66 cr.

*These courses include an international component.

Recommended Professional Courses for Certification as a CPA, CMA, and CIA

ABF-ACTG-306 Accounting for Non-Profit Organizations	
ABF-ACTG-311 Federal Income Taxes (Corporate)	
ABF-ACTG-312 Cost Accounting II	
ABF-FINA-362 Investment	

Major in Finance for the Bachelor of Science Degree

Required Courses:

Business and Management Core Courses	36 cr.
ABF-FINA-361 Principles of Financial Management II	3 cr.
ABF-FINA-371 International Financial Management	3 cr.
MNGT-393 Business Policy	3 cr.
Five courses from the following:	15 cr.
ABF-ACTG-310 Federal Income Taxes (Individual)	3 cr.
ABF-ACTG-311 Federal Income Taxes (Corporate)	3 cr.
ABF-FINA-362 Investment	3 cr.
ABF-FINA-363 Security Analysis	3 cr.

ABF-FINA-364 Problems in Business Finance	3 cr.
ABF-FINA-366 Financial Institutions	3 cr.
ABF-FINA-367 Short-term Financial Management	3 cr.
ABF-FINA-369 Speculative Markets	3 cr.
ABF-FINA-370 Option Pricing: Theory and Strategic Applications	3 cr.
ABF-FINA-372 Portfolio Management	3 cr.
ABF-FINA-373 Intermediate Financial Management	3 cr.
ABF-FINA-374 Futures Trading Strategies	3 cr.
ABF-FINA-375 Debt Markets and Portfolio Strategies	3 cr.
ABF-FINA-376 Technical Analysis of the Futures Market	3 cr.
Total	60 cr.

Minor in Accounting

(21 cr. hrs.)

This minor provides the background for professional entry level positions in accounting.

Required Courses:

ABF-ACTG-201 Accounting I	3 cr.
ABF-ACTG-202 Accounting II	3 cr.
ABF-ACTG-301 Cost Accounting I	3 cr.
ABF-ACTG-307 Auditing Theory and Problems	3 cr.
ABF-ACTG-310 Federal Income Taxes (Individual)	3 cr.
ABF-ACTG-321 Intermediate Financial Accounting I	3 cr.
ABF-ACTG-322 Intermediate Financial Accounting II	3 cr.
Total	21 cr.

With the addition of six credit hours of business law, the completion of this minor should meet the minimum eligibility requirements for taking the CPA examination in most states.

Minor in Business Law

(21 cr. hrs.)

This minor provides a background for students seeking semi-professional paralegal careers and for students interested in the impact of law on business. However, this minor is **not** a pre-law program.

Required Courses:

ABF-ACTG-201 Accounting I	3 cr.
ABF-ACTG-202 Accounting II	3 cr.
ABF-BLAW-280 Business Law I	3 cr.
ABF-BLAW-281 Business Law II	3 cr.
ABF-BLAW-285 The Legal Environment of Business	3 cr.
ABF-BLAW-382 Business Law III	3 cr.
One course from the following:	3 cr.
ABF-ACTG-310 Federal Income Taxes (Individual)	3 cr.
ABF-FINA-362 Investment	3 cr.
MNGT-392 Business, Technology and Society	3 cr.
Total	21 cr.

Minor in Finance

(21 cr. hrs.)

This minor provides an introduction to finance for students interested in the financial aspects of organizations.

Required Courses:

ABF-FINA-360 Principles of Finance	3 cr.
ABF-FINA-362 Investment	3 cr.
ABF-FINA-363 Security Analysis	3 cr.
ABF-FINA-366 Financial Institutions	3 cr.
ABF-FINA-373 Intermediate Financial Management	3 cr.

Two courses from the following: 6 cr.

ABF-FINA-361 Principles of Financial Management II	3 cr.
ABF-FINA-364 Problems in Business Finance	3 cr.
ABF-FINA-367 Short-term Financial Management	3 cr.
ABF-FINA-369 Speculative Markets	3 cr.
ABF-FINA-370 Option Pricing: Theory and Strategic Applications	3 cr.
ABF-FINA-371 International Financial Management	3 cr.
ABF-FINA-372 Portfolio Management	3 cr.
ABF-FINA-374 Futures Trading Strategies	3 cr.
ABF-FINA-375 Debt Markets and Portfolio Strategies	3 cr.
ABF-FINA-376 Technical Analysis of the Futures Markets	3 cr.
Total	21 cr.

COURSE OFFERINGS

ABF-350 Management Information Systems, 3 cr. This course centers on the use of information systems (especially computer based) to provide information on which business decisions are made. Particular emphasis is placed on the system user's role in project development, implementation and success. **Prereq.:** CS-100 and 60 hours completed.

Accounting

ABF-ACTG-201 Accounting I, 3 cr. Accounting is a process for measurement of business activity. This course introduces the underlying assumptions of accounting as they pertain to sole-proprietorship: recording and reporting of transactions, preparation and interpretation of financial statements. **Prereq.:** 30 credit hours completed; MATH-111.

ABF-ACTG-202 Accounting II, 3 cr. This course completes the study of interpretation of financial data introduced in Accounting I. Emphasis is placed on ownership and managerial accounting. **Prereq.:** ABF-ACTG-201.

ABF-ACTG-301 Cost Accounting I, 3 cr. The course expands upon the study of accounting information used to value products for inventory, needed by management to plan and control operations. Topics include job order and process cost accounting systems, standard costs and variance analysis, flexible budgeting, direct costing and break-even analysis. **Prereq.:** ABF-ACTG-202.

ABF-ACTG-306 Accounting for Non-Profit Organizations, 3 cr. A study of the special techniques employed in recording and reporting financial data of non-profit governmental units and private non-profit organizations. *Prereq.:* ABF-ACTG-322.

ABF-ACTG-307 Auditing Theory and Problems, 3 cr. Auditing contributes to the reliability of financial and other data. This course, comprised of theory and philosophy of auditing, makes it an essential part of an accountant's knowledge. Topics include standards-general, field work and reporting, evidential matter, review of internal control, auditing techniques, practices, problem-solving, and a study of A.I.C.P.A. industry audit guides. *Prereq.:* ABF-ACTG-322.

ABF-ACTG-308 Advanced Auditing, 3 cr. This course enhances the students understanding of auditing principles. Included is a detailed study of statements of auditing standard, evidential matter, techniques, problem solving, and a study of AICPA industry audit guidelines. *Prereq.:* ABF-ACTG-307.

ABF-ACTG-310 Federal Income Taxes (Individual), 3 cr. Fundamentals of tax accounting and reporting with emphasis on individuals. Topics include gross income and exclusions, deductions to arrive at and deductions from gross income, gain or loss recognition, basis, capital gains and losses, credits and administration. *Prereq.:* ABF-ACTG-202.

ABF-ACTG-311 Federal Income Taxes (Corporate), 3 cr. Advanced development of topics discussed in the first tax course. Additional topics include matters specifically applicable to partnerships, corporations, and basic introductions to estate and gift taxes. Tax research techniques are also developed in the subject. *Prereq.:* ABF-ACTG-310.

ABF-ACTG-312 Cost Accounting II, 3 cr. This course is a logical continuation of the prerequisite course with even greater emphasis on accounting information used for management planning and control. Topics include division performance measurement, transfer pricing, and application of quantitative techniques to cost accounting. *Prereq.:* ABF-ACTG-301.

ABF-ACTG-313 Internal Auditing and Management Control, 3 cr. Internal auditing is an independent appraisal activity within an organization for the review of operations aimed at promoting its efficiency and effectiveness. This course explores the concepts and standards of internal auditing and their applications. Topics include the discussion of the nature and environment of internal auditing, disciplines related to internal auditing, internal auditing process and the organization and administration of an internal auditing department. *Prereq.:* ABF-ACTG 307 and ABF 350.

ABF-ACTG-321 Intermediate Financial Accounting I, 3 cr. This course begins the four-course professional financial accounting sequence. This is a comprehensive study of the theory and practice of public accounting and the pronouncements of the Financial Accounting Standards Board. This course emphasizes theory, working capital and long term assets. *Prereq.:* ABF-ACTG-202.

ABF-ACTG-322 Intermediate Financial Accounting II, 3 cr. This is the second course in the professional financial accounting sequence. This course emphasizes long-term

liabilities, equity, revenue recognition and the statement of changes. *Prereq.:* ABF-ACTG-321.

ABF-ACTG-324 Advanced Financial Accounting IV, 3 cr. This is the fourth course in the professional financial accounting sequence. This course emphasizes multi-national and domestic consolidations. *Prereq.:* ABF-ACTG-322.

ABF-ACTG-325 Contemporary Financial Accounting Issues, 3 cr. The course covers an in-depth investigation of contemporary accounting issues and problems, including analysis and evaluation of most recent accounting pronouncements and articles in major accounting journals. *Prereq.:* ABF-ACTG-322.

ABF-ACTG-380 International Accounting, 3 cr. This course is concerned with an examination of the environmental factors affecting accounting concepts and standards. Differences in the cultural, social, political, legal and economic environment are the determining factors in the selection of accounting concepts and standards. Coverage will include country and regional studies and accounting problems related to multinational businesses such as foreign currency translation. *Prereq.:* ABF-ACTG 321 and ABF-ACTG 322.

ABF-ACTG-382 Internship in Accounting, 3-6 cr. *Prereq.:* consent of instructor.

ABF-ACTG-386 Independent Study in Accounting, 1-3 cr. *Prereq.:* Consent of instructor.

ABF-ACTG-401 Financial Accounting, 3 cr. This course explores the concept of financial accounting. Development and applications as related to financial statements, liabilities, owner's equity and measurement of income. *Prereq.:* MNGT 368 or equivalent undergraduate Statistics course.

ABF-ACTG-402 Managerial Accounting, 3 cr. This course focuses on accounting methods applicable to the accumulation and analysis of financial data relevant to managerial decision making problems. Topics include cost behavior, budgeting, cost allocation, cost accounting systems and capital budgeting. *Prereq.:* ABF-ACTG-401.

ABF-ACTG-410 Seminar in Tax Planning, 3 cr. This course focuses on a managerial approach to taxation through emphasis on major provisions of the income tax law and related administrative and judicial rulings as they affect business transactions. This course also includes consideration for the tax structure and its role as a tool for business planning. *Prereq.:* ABF-ACTG-401 and ABF-ACTG-402.

ABF-ACTG-412 Accounting for Planning and Control, 3 cr. This course provides for systematic and in-depth discussion and analysis of various accounting models which are useful to organizational planning and control, including the role of accounting systems in developing and refining data necessary for cost and managerial planning. *Prereq.:* ABF-ACTG 401 and ABF-ACTG 402.

ABF-ACTG-421 Current Topics in Financial Accounting, 3 cr. This course provides a conceptual framework for current issues in financial accounting measurement and reporting, and valuation of assets, liabilities and income determination and other necessary disclosures of financial information. *Prereq.:* ABF-ACTG 401 and ABF-ACTG 402.

ABF-ACTG-450 Management Information Systems, 3 cr. This course focuses on the areas of computer-based systems and technology as a means of addressing human and organizational information needs. Consideration is given to methods of management decision making, conflicting demands imposed on a management information system, and human limitations in the ability to absorb and apply information. Procedures for creating, storing and retrieving computer based information are discussed in terms of both organizational requirements and resource limitations. *Prereq.:* ABF-ACTG 401 and ABF-ACTG 402.

ABF-ACTG-500 Master's Project, 3 cr. Approval of major advisor is necessary.

ABF-ACTG-501 Master's Thesis, 6 cr. Approval of major advisor is necessary.

Business Law

ABF-BLAW-280 Business Law I, 3 cr. Origins and growth of the common law. Analysis of feasibility of exercising rights and undertaking duties with knowledge of the rules of law of torts and of contracts. *Prereq.:* 30 credit hours of college work.

ABF-BLAW-281 Business Law II, 3 cr. Study of the law of sales, including: responsibilities of implied and express warranties, transfer of title, risk of loss, documents of title, bulk sales, analysis of the law of commercial paper, negotiable instruments, form, negotiation, warranties, holder in due course, bank items, uniform commercial code. *Prereq.:* ABF-BLAW-280.

ABF-BLAW-285 The Legal Environment of Business, 3 cr. A study of governmental regulation of the conduct of business. Topics include sources of authority, the Constitution and Bill of Rights, administrative agencies, litigation, and arbitration as means of resolving disputes, anti-trust laws, mergers and acquisitions, securities regulations, employment and labor management regulations, environmental regulations, and product liability and consumer protection. *Prereq.:* 30 credit hours of college work.

ABF-BLAW-382 Business Law III, 3 cr. Analysis of the law of agency. Study of the rights and liabilities of partnership and corporate forms of business organization; bailments; ownership of personal property. *Prereq.:* ABF-BLAW-280.

ABF-BLAW-485 Legal and Social Environment of Business and Management, 3 cr. This course introduces the American legal system as one sphere of influence in the business operation. Topics include anti-trust laws, mergers and acquisitions, securities regulations, equal employment, and labor management regulations, product liability, and consumer protection. Litigation and arbitration as methods for resolving disputes are also covered. The social responsibilities, ethical concerns and dilemmas of the manager are stressed as part of the practical decision making environment. *Prereq.:* Admission to M.B.A. program.

Finance

ABF-FINA-360 Principles of Finance, 3 cr. This course is a study of the effect of the theory of valuation on decision making within the firm. Topics include capital budgeting,

leverage, dividend theory, and present value. *Prereq.:* 60 credit hours completed, MATH-111, ABF-ACTG-202 and MNGT-368.

ABF-FINA-361 Principles of Financial Management II, 3 cr. This is a second course in basic corporate finance required for all finance majors. The course concentrates on those areas of corporate finance not covered in Principles of Finance. *Prereq.:* Fina 360.

ABF-FINA-362 Investment, 3 cr. An introduction to financial markets. Particular emphasis is placed on valuation and the characteristics of different financial assets. *Prereq.:* ABF-FINA-360.

ABF-FINA-363 Security Analysis, 3 cr. This course analyzes the factors affecting the market valuation of securities utilizing fundamental analysis and modern portfolio theory. *Prereq.:* ABF-FINA 360.

ABF-FINA-364 Problems in Business Finance, 3 cr. This course, employing the case method, is designed to help the student through problem-solving as well as learning skills for making financial decisions for corporations. *Prereq.:* ABF-FINA-360 and senior status.

ABF-FINA-366 Financial Institutions, 3 cr. This course provides an integrated view of the concepts and principles of financial flows in the economy. The role of intermediation and interest rates is stressed. *Prereq.:* ABF-FINA-362.

ABF-FINA-367 Short-term Financial Management, 3 cr. The subject matter of the course includes a detailed study of the short-term assets and liabilities on a corporate balance sheet. It also develops skills useful to a bank loan officer, a credit analyst, a cash manager, or personnel on the corporate treasurer's staff. *Prereq.:* ABF-FINA-360.

ABF-FINA-369 Speculative Markets, 3 cr. This course reviews the principles and mechanics of the major speculative financial instruments: commodities, financial futures and options. Particular emphasis is placed on pricing theories and trading strategies. The role of risk transfer as an economic good is discussed. The student is expected to complete a project involving simulated trading. *Prereq.:* ABF-FINA-360.

ABF-FINA-370 Option Pricing: Theory and Strategic Applications, 3 cr. The course is designed to familiarize students with the theoretical foundations of options pricing. This knowledge is then used to design strategies for profiting from mispriced options. Mathematical complexity will be kept to a minimum. The use of personal computers as decision-making aids will be strongly emphasized. *Prereq.:* ABF-FINA-360.

ABF-FINA-371 International Financial Management, 3 cr. The course focuses on the international aspects of finance management. Particular emphasis is placed on the control of exchange rate risk and financing multinational corporations. *Prereq.:* ABF-FINA-360.

ABF-FINA-372 Portfolio Management, 3 cr. The course covers the theory and the techniques of portfolio management. Particular emphasis is placed on definition of objectives for and the construction of portfolios. This course prepares the student for the first CFA exam. *Prereq.:* ABF-FINA-362.

ABF-FINA-373 Intermediate Financial Management, 3 cr. This course is an extension of FINA-360. It covers capital structure, dividend policy, mergers, and leasing. Its

goal is to develop an analytical and rigorous approach to solving financial management problems. By the end of the course the student should be familiar with the use of spreadsheet programs to manipulate data. **Prereq.:** ABF-FINA-360.

ABF-FINA-374 Futures Trading Strategies, 3 cr. The course is designed to emphasize the practical, rather than the theoretical aspects of futures markets. Students will be exposed to both technical and fundamental approaches to trading, and to disciplined money management techniques.

Prereq.: ABF-FINA-360.

ABF-FINA-375 Debt Markets and Portfolio Strategies, 3 cr. The first part of the course is designed to introduce students to some of the very recent innovations in the fixed-income securities market, as for example, zero coupon bonds, floating rate notes and convertible issues. The next segment familiarizes students with portfolio management considerations unique to debt instruments. Mathematical complexity, though inevitable, will be kept to a minimum. **Prereq.:** ABF-FINA-360.

ABF-FINA-376 Technical Analysis of the Futures Markets, 3 cr. This course will enable students to read and interpret futures price charts. Technical analysis (as opposed to fundamental analysis) stresses the information content of part and price data and is based on the premise that prices do not always move randomly. Students believing in this underlying philosophy ought to benefit from this course.

Prereq.: ABF-FINA-360.

ABF-FINA-382 Internship in Finance, 3-6 cr. **Prereq.:** consent of instructor.

ABF-FINA-395 Independent Study in Finance, 1-3 cr. **Prereq.:** consent of instructor.

ABF-FINA-460 Financial Management, 3 cr. This course explores investment and financial decisions faced by the financial officer in the management of funds in the business firm. It includes capital expenditure studies, portfolio analysis, financial markets, capital structures, international finance and financial planning and analysis. **Prereq.:** MNGT 368 or equivalent undergraduate Statistics course.

ABF-FINA-462 Investment Strategies, 3 cr. This course focuses on the practical use of the techniques of modern finance in managing pension/endowment funds. Students will be exposed to the foundations of modern portfolio theory and will be required to develop a plan for inventing a significant amount of pension fund assets. **Prereq.:** FINA 460.

ABF-FINA-470 Corporate Financial Strategy, 3 cr. Corporate financial strategy in practice is emphasized in this course. Topics to be discussed include: (a) financial planning, (b) strategies for raising capital, (c) strategies for allocating capital among different uses, and (d) strategies for working capital management. **Prereq.:** FINA 460.

ABF-FINA-474 Seminar in Futures and Options Trading, 3 cr. This seminar provides a rigorous treatment of the commodity/financial and options markets. Emphasis is placed on the theory underlying futures/options instruments. However, the course is a practical, problem-solving approach to market-generated challenges, and will concentrate primarily on advanced trading and hedging techniques. **Prereq.:** FINA 460.

ABF-FINA-500 Master's Project, 3 cr. Approval of major advisor is necessary.

ABF-FINA-501 Master's Thesis, 6 cr. Approval of major advisor is necessary.

GENERAL BUSINESS ADMINISTRATION

Major in General Business Administration for the Bachelor of Science Degree

The General Business Administration B.S. degree is provided for students who wish to major in Business and Management without specializing in any one specific area. Students take the basic Business and Management core curriculum plus two or four courses in each of the four specific Business and Management disciplines. This program is for students who want a generalist degree.

Required Courses:

Business and Management Core Courses	36 cr.
Two Accounting Courses:	6 cr.
ABF-ACTG-301 Cost Accounting I	3 cr.
ABF-ACTG-321 Intermediate Financial Accounting I	3 cr.
ABF-ACTG-324 Advanced Financial Accounting IV	3 cr.

Two Finance Courses:	6 cr.
ABF-FINA-362 Investment	3 cr.
ABF-FINA-364 Problems in Business Finance	3 cr.
ABF-FINA-366 Financial Institutions	3 cr.
ABF-FINA-372 Portfolio Management	3 cr.

Two Marketing Courses:	6 cr.
MKTG-351 Consumer Behavior	3 cr.
MKTG-352 Advertising	3 cr.
MKTG-353 Marketing Research	3 cr.
MKTG-358 International Marketing	3 cr.
MKTG-359 Marketing Management	3 cr.

Four Management Courses:	12 cr.
MNGT-371 Organizational Behavior	3 cr.
MNGT-372 Organization Theory	3 cr.
MNGT-381 International Management	3 cr.
MNGT-393 Business Policy	3 cr.

Total 66 cr.

"Second Major" in General Business Administration for the Bachelor of Science Degree

The General Business Administration as a Second Major program is designed specifically for students whose B.A. or B.S. degree is in a non-business discipline. Students complete the College of Business and Management core requirements and then choose to concentrate in a specific area such as accounting, finance, marketing or management.

Required Courses:

Business and Management Core Courses	36 cr.
MNGT-393 Business Policy	3 cr.
One of the following:	3 cr.
MKTG-358 International Marketing	3 cr.
MNGT-381 International Management	3 cr.
MNGT-398 International Business	3 cr.
Two courses from one area:	6 cr.
Accounting, Finance, Marketing, Management	
Total	48 cr.

MANAGEMENT

Rasoul Afifi, Ph.D., Associate Professor, Chairperson
Hamid Akbari, Ph.D., Associate Professor
Kathleen A. Carlson, Ph.D., Associate Professor
Mei-Lung Chen, Ph.D., Assistant Professor
H. Durward Hofler, Ph.D., Professor
William H. Macey, Ph.D., Associate Professor
Sheldon Rothstein, M.A., Assistant Professor
Allen N. Shub, Ph.D., Associate Professor

The Department of Management offers courses leading to the B.S. in Management, the B.S. in General Business Administration and minors which serve to complement studies in other areas of business. The courses offered by the department provide a background in the study of individual members of organizations, the interactions of small groups within organizations and an overview of larger organizations in their entirety. Management courses serve to broaden the students' understanding of their own current or future role in the workforce, and provide background essential for carrying out the management function.

Students with a bachelor of science degree in management can gain entry level positions as production supervisors, personnel recruiters, employment interviewers, labor relations assistants, salary and wage administrators, and management trainees in a variety of business and industrial companies.

The department offers a variety of electives for students interested in a specific area of business (e.g., production management), topical areas of concern to the modern manager (e.g., the changing role of women in business), or small business development and/or administration.

UNDERGRADUATE PROGRAMS

Major in Management for the Bachelor of Science Degree

Required Courses:

Business and Management Core Courses	36 cr.
MNGT-371 Organizational Behavior	3 cr.

MNGT-372 Organization Theory	3 cr.
MNGT-381 International Management	3 cr.
MNGT-393 Business Policy	3 cr.

Four electives from the following:

MNGT-369 Advanced Quantitative Methods for Managerial Decision Making	3 cr.
MNGT-373 Personnel Administration	3 cr.
MNGT-374 Human Resource Planning	3 cr.
MNGT-375 Management and Organization Communications	3 cr.
MNGT-376 Small Business Management	3 cr.
MNGT-378 Changing Role of Women in Business	3 cr.
MNGT-380 Entrepreneurship	3 cr.
MNGT-389 Training: A Managerial Perspective	3 cr.
MNGT-390 Compensation Management and Performance Appraisal	3 cr.
MNGT-391 Business Simulation	3 cr.
MNGT-392 Business, Technology and Society	3 cr.
MNGT-394 Organization Development	3 cr.
MNGT-395 Business Modeling	3 cr.
MNGT-396 Industrial and Labor Relations and Collective Bargaining	3 cr.
MNGT-397 Career Management	3 cr.
MNGT-398 International Business	3 cr.
MNGT-399 Management of Change	3 cr.

Total 60 cr.

There are many ways that the various elective courses in management may be combined for a distinct career focus. For example, students interested in personnel administration should select courses in **human resource management** from the following:

MNGT-373 Personnel Administration	3 cr.
MNGT-374 Human Resource Planning	3 cr.
MNGT-389 Training: A Managerial Perspective	3 cr.
MNGT-390 Compensation Management and Performance Appraisal	3 cr.
MNGT-396 Industrial and Labor Relations and Collective Bargaining	3 cr.
MNGT-397 Career Management	3 cr.

Students interested in **production management** should select their electives from the following:

MNGT-375 Management and Organization Communications	3 cr.
MNGT-377 Production Management	3 cr.
MNGT-391 Business Simulation	3 cr.
MNGT-395 Business Modeling	3 cr.
MNGT-396 Industrial and Labor Relations and Collective Bargaining	3 cr.

The above two examples are illustrative. For career direction, the student should seek advice from the Chairperson of the Management Department or the Program Advisor.

Minor in Management

(21 cr. hrs.)

This minor is designed for students interested in entry-level management positions and/or general managerial careers in business organizations.

Required Courses:

MNGT-370	Principles of Management	3 cr.
MNGT-371	Organizational Behavior	3 cr.
MNGT-372	Organization Theory	3 cr.
MNGT-373	Personnel Administration	9 cr.
Three additional management electives		9 cr.
Total		21 cr.

Minor in International Business (21 cr. hrs.)

The International Business Minor is intended for majors in business who are interested in working in organizations with international links. Non-business majors interested in studying international business are encouraged to pursue the International/Intercultural Studies Minor in the Center for Individualized Studies.

The International Business Minor can have a Marketing/Management focus or an Accounting/Finance focus. The requirements for each are:

International Business—Marketing/Management Focus

MKTG-358	International Marketing	3 cr.
MKTG-367	Exporting	3 cr.
MNGT-381	International Management	3 cr.
MNGT-398	International Business	3 cr.

Three courses from the following: 9 cr.

ABF-ACTG-323	Intermediate Financial Accounting III	3 cr.
ABF-FINA-371	International Financial Management	3 cr.
ECON-322	International Economics	3 cr.
ANTH-243	Culture and International Business	3 cr.
SSCI-1/IS-310	Business in Pacific Basin Market Area	3 cr.
G&ES-350	Marketing Geography	3 cr.
Total		21 cr.

International Business—Accounting/Finance Focus

ABF-ACTG-323	Intermediate Financial Accounting III	3 cr.
ABF-FINA-371	International Financial Management	3 cr.
MNGT-398	International Business	3 cr.

Four courses from the following: 12 cr.

MKTG-358	International Marketing	3 cr.
MKTG-367	Exporting	3 cr.
MNGT-381	International Management	3 cr.
ANTH-243	Culture and International Business	3 cr.
SSCI-1/IS-310	Business in Pacific Basin Market Area	3 cr.
Total		21 cr.

COURSE OFFERINGS

MNGT-368 Quantitative Methods for Managerial Decision Making, 3 cr. Quantitative methods specifically applied to management, marketing, finance, and accounting problems. Topics covered include basic probability theory, measurement and scaling, descriptive statistics, correlation, estimation, and regression. The use of personal computers as decision making aids will be emphasized. *Prereq.: MATH-110 and MATH-111.*

MNGT-369 Advanced Quantitative Methods for Managerial Decision Making, 3 cr. This course is a continuation of MNGT-368. Topics covered include regression, multiple regression, part and partial correlation, experimental design principles, analysis of variance, analysis of covariance, index numbers, time series design, advanced multivariate topics, principal components analysis, and path analysis. The use of personal computers as multivariate decision making aids will be emphasized. *Prereq.: MATH-110, MATH-111 and MNGT-368.*

MNGT-370 Principles of Management, 3 cr. An introductory course in the management of organizations. This course attempts to develop a broad-scoped, integrated understanding of organizations and their management. Traditional and current theories of organizational management are examined. Special attention will be given to the planning, organizing, staffing, leading, and controlling functions of management. Topics also include career development; the external environment; business and society; and the international environment. While the focus is on management in business organizations, the concepts are applicable to other types of complex organizations, notably government agencies, hospitals, non-profit organizations, international business, etc. *Prereq.: 60 credit hours completed.*

MNGT-371 Organizational Behavior, 3 cr. A broad survey analyzing the contributions of behavioral science to management and administration. Topics stressed are scientific method in organizational research, individual and group dimensions of organizational behavior, decision making, barriers to communication, work motivation, intergroup conflict, leadership, organizational climate and development, and analysis of power in organizations. Role playing, simulations, class exercises, and case studies are used. *Prereq.: MNGT-370.*

MNGT-372 Organizational Theory, 3 cr. This course approaches the study of business organizations and their management from a macro perspective. The focus of organization theory is to study the structure and design of organizations. Students are presented with both the descriptive and prescriptive aspects of the discipline in order to provide insight into the planning and designing of organizations for effectiveness. Major topics include rational and social systems views of organizations; the social, technical, legal and economic environments of organizations; organizational characteristics such as size technology; structure, climate and administrative philosophy; elements of organizational structure and design (authority structure); specialization; degree of centralization, policies, communication channels, and reward systems; organizational processes including goal setting,

strategic planning, decision making, coordinating and controlling, and organizational survival. *Prereq.: MNGT-370.*

MNGT-373 Personnel Administration, 3 cr. Organization and operation of the personnel department. Role of the personnel department in the organization. Topics include task/job development (job analysis, job design, job specification, job enlargement, job enrichment, performance standards, work rules, work conditions); staffing the organization (recruitment, selection, placement, promotion, demotion, interviewing, testing); performance appraisal; training and development; compensation (wage and salary administration, supplementary benefits, incentives); collective bargaining (unionization, negotiation, grievance and arbitration); legal and other environmental issues are stressed. *Prereq.: MNGT-370.*

MNGT-374 Human Resource Planning, 3 cr. This course focuses on planning for human resource needs from the perspectives of the organization, organizational units, and individual members of the organization. Special consideration is given to career planning and management, management succession and development. Within these major emphases, topics include forecasting human resource needs; position planning; models for human resource planning; linking human resource planning to organizational planning; line and staff roles in human resource planning and development; human resource planning and development as change processes. *Prereq.: MNGT-371.*

MNGT-375 Management and Organization Communications, 3 cr. Formal structures, channels, and mechanism for communication within the organization and its environment. Informal process of communication within the organization. Supervisory and management roles in organizational communication. Dynamics of communication in and between organization work units. Functional roles/ perspectives affecting organizational communications. Class exercises and case studies will be used. *Prereq.: MNGT-371.*

MNGT-376 Small Business Management, 3 cr. Application of management concepts and techniques to the small firm. Special attention will be given to the particular nature, opportunities, needs, and problems of small manufacturing, wholesale, retail, and business service firms. Topics include comparison of similarities, differences, and relations between small and large firms, issues and methods in starting a small firm (including selecting the legal mode of organization, buying an existing firm, franchising); funding; risk and venture management for small firms; the role of local, state, and federal government. Case studies and field research may be included. *Prereq.: MNGT-370.*

MNGT-377 Production Management, 3 cr. This course covers subjects related to the design of production, inventory, and quality control systems. In the production systems design the following topics are covered: design of products and services, capacity planning, process design, work analysis and measurement, facility location, production scheduling. In the inventory control systems design the following issues will be discussed: relation of inventory system to the other functions of organizations, cost structure, deterministic and prob-

abilistic control models. In the quality control design the following are covered: quality concept, statistical quality control methods such as control charts, sampling, etc. *Prereq.: MATH-110, MATH-111, MNGT-368 and MNGT-370.*

MNGT-378 The Changing Role of Women in Business, 3 cr. The emerging role of women in business, and the special problems and opportunities created as a result. This is a course for both male and female students. The course presents and reviews the issues relevant to the emerging role of females in management and organizations. Critical evaluation of the issues are practiced in class discussions. *Prereq.: MNGT-370.*

MNGT-379 Introduction to Operations Research and Management Science, 3 cr. A survey of applied scientific methods used in management problems. Among the topics considered are linear programming and related algorithms, dynamic programming, decision theory, Markov analysis, project evaluation, and review techniques. *Prereq.: MATH-110, MATH-111 and MNGT-368.*

MNGT-380 Entrepreneurship, 3 cr. Examination of the entrepreneurial process and the role of entrepreneurship in new ventures and small businesses. Includes discussion on how to start a new venture; obtaining financing for new businesses; marketing, R & D, and production of new products and services. Evaluation of the entrepreneurs and ways to encourage the entrepreneurial spirit in organizations of all sizes. Students will be required to write a realistic business plan. *Prereq.: MNGT-370.*

MNGT-381 International Management, 3 cr. This course examines the issues that face the international manager. Environmental conditions affecting the international manager, especially culture, are examined. Major topics include management styles, communication, personnel issues, and organizational theory in cross cultural and multinational management settings. *Prereq.: MNGT-370.*

MNGT-382 Internship in Management, 3-6 cr. *Prereq.: consent of instructor.*

MNGT-386 Independent Study in Management, 1-3 cr. *Prereq.: consent of instructor.*

MNGT-389 Training: A Managerial Perspective, 3 cr. Organization and operation of the training "function" in business and industry. Topics include: job and task analysis, training needs assessment from individual and organizational perspectives, obtaining managerial support for training effort, arrangement of the training environment, linking training needs assessment to training program content, selecting instructional methods, retention and transfer of learning, training program evaluation, on-site and off-site training methods, techniques for management development, and the role of EEO in the training environment. *Prereq.: MNGT-370.*

MNGT-390 Compensation Management and Performance Appraisal, 3 cr. Views compensation primarily from the viewpoint of the employer. Focus on issues that revolve around the work ethic, the employer-employee exchange process, and the basic components of the compensation system to establish a workplace environment that stimulates employee performance. Topics to include: work environment,

government and union influence, identifying job contents, job evaluations, determining pay and comparable worth, compensation packages and administration, performance appraisal and feedback. **Prereq.:** MNGT-371.

MNGT-391 Business Simulation, 3 cr. This advanced course involves the simulation of various aspects of a business enterprise. Students assume roles of managers in simulated firms and make operational decisions for their firms in a simulated and competitive marketplace. Decisions may include such aspects of the firm's operation as marketing, finance, personnel, and accounting. **Prereq.:** senior status and all business and management core courses.

MNGT-392 Business, Technology and Society, 3 cr. Course deals with the environment of business. The role of technology in modern business organizations is considered as well as social change and social pressure on the business community. Other topics to be covered are the social responsibility of business; "The Social Audit"; its function in business organizations; managing modern business: changes and adaptability; technology transfer activities in modern business: the U.S. and developing countries' experiences.

Prereq.: MNGT-372.

MNGT-393 Business Policy, 3 cr. This advanced capstone course involves the study of the concepts and techniques of determining strategies and operational policies of business organizations. Primarily through the use of cases, students are exposed to theories of business policy, business environment, and the impact of different policy making scenario on selected functions of the business organization.

Prereq.: senior status and all business and management core courses completed with the exception of MNGT-379.

MNGT-394 Organization Development, 3 cr. This course examines the nature, principles, and strategies of organization development. Topics include theory, concepts, and principles of organization development; historical development, current state-of-the-art, and trends; problems and issues of organization development; the organization/system (goals and objectives, performance and performance appraisal, career development, organization climate, quality-of-life issues); organization-environment, organization-individual and intergroup interfaces; system change; planned change; internal/external organization development practitioners. Examination of organization development strategies and methods include team building, action research, confrontation meeting, third-party intervention, process consultation, laboratory training, collateral organization, etc. **Prereq.:** senior status; and MNGT-371.

MNGT-395 Business Modeling, 3 cr. Basic framework of model building and its use in management problems is studied. The stages of model development such as abstraction, model selection and formulation, parameter estimation, and sensitivity analysis is examined in detail. Various modeling techniques are discussed in terms of their assumptions, limitations, and applicabilities. A survey of models with reference to special application areas such as finance, accounting, marketing production planning, manpower planning, etc. are studied. Students work on a project in which they apply

the basic ideas in the course. **Prereq.:** senior status and all business and management core courses.

MNGT-396 Industrial and Labor Relations and Collective Bargaining, 3 cr. This course focuses on the collective bargaining process between management and employees, especially in unionized organizations but also in non-union organizations. Major topics include: historical development and current issues of the American labor movement; the unionization process and its impacts on organization; the negotiation process; the grievance/arbitration process; labor laws. **Prereq.:** MNGT-370.

MNGT-397 Career Management: The Study of Careers in Organizations from Management's Perspective, 3 cr. Emphasis on organizational management, succession and replacement, job vacancy information, career paths, out-placement counseling, and retirement preparation. Additional topics include: individual self-analysis, assessment centers, assertiveness training, promotion and transfer, increasing mobility. **Prereq.:** MNGT-371 and MNGT-373 or MNGT-374.

MNGT-398 International Business, 3 cr. This course deals with problems of corporate strategy in an international setting as well as the effect of multinational companies on host countries. Specific topics include concepts of international trade; developing overseas business; the multinational companies relationship with the host government and its effects on the host country's economy; issues of marketing, supply, labor and personnel management, finance, and organization. **Prereq.:** MNGT-370.

MNGT-399 Management of Change, 3 cr. An advanced seminar course focusing on organizational change management by managers and employees who wish to initiate a change, are assigned responsibility to manage a change, or who are affected by change initiated by others. Major topics include: nature and dynamics of change and change management; dimensions of change; change management strategies; cycle theories; stability and change; resistance to change; the change manager as change agent or resister/defender. **Prereq.:** MNGT-370.

MNGT-468 Quantitative Methods and Managerial Statistics, 3 cr. This course assumes a working knowledge of statistics covered in undergraduate business courses, including basic probability theory, descriptive statistics, correlation, estimation and simple regression. Students build on this foundation through the application of correct statistical models to specific situations and the proper interpretation of results for decision-making. Advanced topics are addressed, including analysis of covariance, multivariate regression, path analysis, principal component analysis and time series decomposition, linear programming and elementary matrix theory. Students must also learn and utilize appropriate computer software packages.

MNGT-471 Management Organizational Behavior, 3 cr. This course examines the contribution of behavioral science to management and administration. Topics include group formation, decision-making, employee participation, communication patterns, intra- and intergroup conflict,

organizational culture, job satisfaction and productivity concerns in an employee oriented environment. Significant emphasis is placed on research methodology and review of the current literature.

MNGT-474 Human Resources Policy and Decision Making, 3 cr. This course addresses personnel policy formulation and implementation. Consideration is given to human resources planning, staffing, development, and placement issues in the context of legal and collective bargaining constraints. A review of topical issues such as employment-at-will, drug testing, honesty in the workplace and other special topics is provided.

MNGT-477 Production and Operations Management, 3 cr. This course provides general coverage of production/operations management in organizations. Emphasis is placed on the application of the P/OM concepts to both goods and service organizations. The information presented is beneficial to students majoring in all of the business administration functional areas. The course covers production scheduling, materials management, facilities planning and layout, material productivity and quality control. Forecasting, scheduling, inventory, and distribution modeling are discussed. Statistical process control is also presented. **Prereq.:** MNGT 468.

MNGT-480 Entrepreneurship, 3 cr. This course focuses on the initiation of new business ventures as contrasted with the management of on-going enterprises. Topics covered include the characteristics of successful entrepreneurs, methods of identifying market opportunities, appraising market potential, determining startup costs of acceptable purchase price, legal aspects of organization or acquisition, raising venture capital, initial capital structure, selection of the board of directors and key managers, allocation of control among involved parties, and method of rewarding entrepreneurs and key managers. Cases, reading, and some outside speakers will be used. The major emphasis, however, will be on the evaluation of prospective "real world" ventures.

MNGT-481 International Management, 3 cr. This course provides for an analysis of the significant policy problems of multinational business. The effects of the economic, political, social, and cultural factors on decision-making in the multinational firm are examined.

MNGT-487 Strategy and Organization, 3 cr. This course serves to integrate preceding courses through the study of strategy formulation and implementation functions and responsibilities of top-level management. The topics addressed include the concept of corporate strategy, the strategic planning and resource allocation processes, the design of formal organizational structure, management control systems, reward and sanction systems, the selection and training of key personnel, and the leadership role of the chief executive officer. Cases and readings are drawn from a variety of types of organizations.

MNGT-488 Strategic Planning, 3 cr. This course provides an examination of various models and research findings in the area of strategic planning and of the theoretical and managerial issues raised by these models, findings, and

evolving organizational practice. The topics covered include concepts of strategy, analytical informational and behavioral characteristics of the strategic planning process, the design and organization of strategic planning systems, and patterns of strategic behavior. Examples are drawn from a variety of institutions, although the major emphasis is on business.

MNGT-489 Management of Organization Change, 3 cr. This course explores the concept of successful management of organizational and behavioral change, focusing on both "planned" and "unplanned" changes and emphasizing the development of change strategies and measurement of change effectiveness. Included will be group laboratory work using video tape systems. Attention will also be given in response to external (e.g., social) changes. Opportunities exist for field work in various institutional contexts.

MNGT-498 International Business, 3 cr. This course provides an overview of the international dimensions of a firm's operations. Alternative methods for reaching foreign markets, operational adjustments and specific problems in dealing with foreign environments, are the principle areas of consideration.

MNGT-500 Master's Project, 3 cr. Approval of major advisor is necessary.

MNGT-501 Master's Thesis, 6 cr. Approval of major advisor is necessary.

MNGT-550 Business Policy, 3 cr. This course integrates the concepts and applications of business strategy formulation and organization. Primarily emphasizing a case approach, the course builds upon the common body of business knowledge developed in other components of the curriculum. The characteristics of business strategy are studied in an organizational framework ranging from small entrepreneurship to multinational corporations. **Prereq.:** Completion of all core courses in program.

MARKETING

Kathy Carlson, Ph.D., Associate Professor of Management,
Acting Chairperson
A. Bruno Manchery, M.B.A., Assistant Professor

Marketing is an essential part of any business organization because it deals with developing, pricing, distributing, and promoting products, services and/or ideas which meet the needs and wants of the consumer. An organization remains viable only to the extent that it successfully satisfies needs and wants of chosen target markets.

The Marketing Department offers a curriculum designed to provide the student with a firm foundation in the basic concepts of marketing (through courses in Principles of Marketing, Consumer Behavior, Marketing Research and Marketing Management). The curriculum also allows the student to explore further his/her own areas of interest in marketing through elective courses. Students majoring in marketing can choose from a variety of careers (personal selling,

retailing, marketing research, advertising, product management, etc.) Students majoring in other business disciplines should become acquainted with marketing because it is an important component of any company's success.

UNDERGRADUATE PROGRAMS

Major in Marketing for the Bachelor of Science Degree

Required Courses:

Business and Management Core Courses	36 cr.
MKTG-351 Consumer Behavior	3 cr.
MKTG-353 Marketing Research	3 cr.
MKTG-358 International Marketing	3 cr.
MKTG-359 Marketing Management	3 cr.
MKTG-393 Business Policy	3 cr.
Two electives from the following:	6 cr.
MKTG-352 Advertising	3 cr.
MKTG-354 Physical Distribution	3 cr.
MKTG-355 Purchasing and Materials Management	3 cr.
MKTG-356 Retailing	3 cr.
MKTG-357 Administration of the Sales Function	3 cr.
MKTG-361 Product Planning	3 cr.
MKTG-365 Advanced Topics in Promotion	3 cr.
MKTG-366 Industrial Marketing	3 cr.
MKTG-367 Exporting	3 cr.
MKTG-378 Changing Role of Women in Business	3 cr.
MNGT-398 International Business	3 cr.
G&ES-350 Marketing Geography	3 cr.
SSCI-1/IS-310 Business in Pacific Basin	3 cr.
Market Area	3 cr.
Total	57 cr.

Minor in Marketing

(21 cr. hrs.)

This program is for students interested in a marketing minor to complement a major discipline such as another field of business, psychology, foreign language, computer science, etc.

Required Courses:

MKTG-350 Principles of Marketing	3 cr.
MKTG-351 Consumer Behavior	3 cr.
MKTG-353 Marketing Research	3 cr.
MKTG-359 Marketing Management	3 cr.
One of the following:	3 cr.
MKTG-352 Advertising	3 cr.
MKTG-357 Administration of the Sales Function	3 cr.
Two of the following:	6 cr.
G&ES-350 Marketing Geography	3 cr.
*MKTG-352 Advertising	3 cr.
MKTG-354 Physical Distribution	3 cr.
MKTG-355 Purchasing and Materials Management	3 cr.

MKTG-356 Retailing	3 cr.
*MKTG-357 Administration of the Sales Function	3 cr.
MKTG-358 International Marketing	3 cr.
MKTG-361 Product Planning	3 cr.
MKTG-365 Advanced Topics in Promotion	3 cr.
MKTG-366 Industrial Marketing	3 cr.
MKTG-367 Exporting	3 cr.
Total	21 cr.

*Can only count once in Marketing minor.

COURSE OFFERINGS

MKTG-350 Principles of Marketing, 3 cr. This course provides a comprehensive overview of the marketing process by explaining its role in the business firm and in society. Major topics include market segmentation and research, purchasing behavior in the consumer and industrial markets, a careful analysis of the marketing mix (product, price, distribution and promotion) and the planning and evaluation of the overall marketing effort. **Prereq.:** ECON-217 and 60 credit hours completed.

MKTG-351 Consumer Behavior, 3 cr. This course examines: the buyer as a problem solver; buying decision processes; sociological and psychological factors affecting buyer behavior; and consumer behavior models. The course shows how consumer behavior concepts are used in the formulation of the firm's marketing strategy. **Prereq.:** MKTG-350.

MKTG-352 Advertising, 3 cr. This course examines the roles and management of advertising, sales promotion, public relations, and publicity in the company's promotional mix. Major topics include determining promotional objectives, budgeting, and planning, executing, evaluating and coordinating the promotional effort. **Prereq.:** MKTG-350.

MKTG-353 Marketing Research, 3 cr. An investigation of the research necessary for the formulation of marketing policies. Topics include research design; sampling; and statistical analysis. **Prereq.:** MKTG-350 and MNGT-368.

MKTG-354 Physical Distribution, 3 cr. An analysis of distribution logistics as they relate to time-service concepts, profit control centers, and technological gains. A study of organizational structure, communications problems and alternatives, inventory management, warehousing, and transportation. **Prereq.:** MKTG-350.

MKTG-355 Purchasing and Materials Management, 3 cr. An upper-division course designed to provide a broad overview of the purchasing and materials management functions of an organization. While generation attention is focused upon the broad field of materials management in the areas of industrial and institutional purchasing, the main emphasis is upon industrial purchasing. The course deals with such topics as the organization of the purchasing department, purchasing techniques, vendor selection, determination of "quality", value analysis, quality control, inventory control, reciprocity, etc. Cases are utilized to provide a better understanding of actual situations. **Prereq.:** MNGT-370 and MKTG-350 or consent of instructor.

MKTG-356 Retailing, 3 cr. The various marketing activities involved in retailing are examined individually and as part of a total system. Emphasis is placed upon factors determining store location, organization, techniques of purchasing, merchandising, and the application of the marketing mix to the retailing function. **Prereq.:** MKTG-350, MNGT-370 recommended.

MKTG-357 Administration of the Sales Function, 3 cr. This course exposes students to the professional salesperson's view of his role in the marketing system. Major topics include planning the sales presentation, preparation of the salesperson's portfolio, prospecting, qualifying, the approach, delivering the presentation, demonstrations, answering objections, closing the sale, and follow up activities. The psychology of selling, the development of specific sales skills, and certain aspects of sales management are highlighted. **Prereq.:** MKTG-350. MNGT-370 recommended.

MKTG-358 International Marketing, 3 cr. This course examines the special problems of marketing in an international setting. Reasons for international expansion, both historically and in the present, are discussed. The cultural, political, and legal environments for international marketing are examined. Problems of product, promotion, price, physical distribution, and organization on an international scale are also examined. **Prereq.:** MKTG-350 or consent of instructor.

MKTG-359 Marketing Management, 3 cr. A capstone course designed to stress the managerial aspects of marketing. Consideration of product, pricing, distribution, promotion, and organization design are related through student projects to the development of the firm's marketing strategy. **Prereq.:** MKTG-350 and one other marketing course. MNGT-370 recommended.

MKTG-360 Marketing Channels, 3 cr. This course is designed to prepare future managers to successfully handle the interrelationships among manufacturers, wholesalers, retailers, and consumers. Topics covered include analysis of marketing channel structures, development of channel strategy, and management of marketing channels. The course will emphasize how to plan, organize, and control the economic, political, and social relationships among institutions and agencies to make certain that products and service are available for use or consumption by industrial, commercial, and household consumers. **Prereq.:** MKTG-350 and MKTG-359.

MKTG-361 Product Planning, 3 cr. This course examines planning and management of the company's product mix. Major topics include organizing for new product development; product mix and line strategies and decision making; the process of new product planning, development, and introduction, positioning the product, management of products through their life cycle; adoption and diffusion; style and fashion; branding and packaging. **Prereq.:** MKTG-350.

MKTG-365 Advanced Topics in Promotion, 3 cr. This course covers the concepts of unique selling proposition, brand imagery, and the accomplishment of marketing objectives through creative strategy in ads and commercials. Additional topics include retail, industrial trade and institutional advertising, public relations, publicity, sales promotion, and direct response promotions. Legal and ethical considerations

and measurement of campaign effectiveness may be covered at the discretion of the instructor. **Prereq.:** MKTG-350. MKTG-352 recommended.

MKTG-366 Industrial Marketing, 3 cr. An indepth look at strategy marketing in the industrial setting. Topics covered include the industrial buyer organization, planning, product and pricing policies, and sales techniques. Extensive use is made of up-to-date readings and cases. Students synthesize their learning in a study of major industrial firm or governmental branch. **Prereq.:** MKTG-350. MNGT-370 recommended.

MKTG-367 Exporting, 3 cr. An introduction to the practical knowledge in exporting. Subjects covered include global issues in exporting, identifying export markets, export strategies, export documentation, traffic management, insurance and financing. **Prereq.:** MKTG-350, or consent of instructor.

MKTG-382 Internship in Marketing, 3 cr. **Prereq.:** consent of instructor.

MKTG-389 Independent Study in Marketing, 3 cr. **Prereq.:** consent of instructor.

MKTG-450 Strategic Marketing Management, 3 cr. This course focuses on the techniques of management as applied to the functional areas of marketing. Both quantitative and behavioral tools are used to examine marketing decision making processes. **Prereq.:** MNGT 368 or equivalent undergraduate Statistics course.

MKTG-451 Consumer Behavior and Marketing Action, 3 cr. This course focuses on the use of concepts from the behavioral sciences and quantitative techniques in analyzing demand, identifying market segments, and predicting customer response to alternative marketing strategies. **Prereq.:** MKTG-450.

MKTG-452 Advertising Management, 3 cr. This course explores advertising from the viewpoint of business management, develops an understanding of the role of advertising under various conditions, and looks at the problems of integrating advertising strategies into the firm's total marketing program. **Prereq.:** MKTG-450.

MKTG-453 Marketing Research—Techniques and Application, 3 cr. This course explores different approaches to planning, collecting, analyzing, and communicating information from the marketplace, including techniques and applications for specific marketing areas. **Prereq.:** MKTG-450 and MKTG-468.

MKTG-456 Channel Distribution and Retailing, 3 cr. This course provides for the study of retailing as an integral part of the economic system and examines retailing from both the manufacturer's perspective and consumer's perspective. It focuses on the management and behavioral theories. **Prereq.:** MKTG-450.

MKTG-458 Comparative and Multinational Marketing, 3 cr. This course focuses on identifying and analyzing worldwide marketing opportunities and generating strategies for overseas marketing, and explores the impact of environmental differences on marketing strategies and customer response. **Prereq.:** MKTG-450.

MKTG-468 Industrial Marketing, 3 cr. This course examines planning, organizing, and controlling industrial market-

ing activities, and studies industrial products and how they are marketed. Different marketing techniques are discussed according to the nature of industrial products and services.

Prereq.: MKTG-450.

MKTG-500 Master's Project, 3 cr. Approval of major advisor is necessary.

MKTG-501 Master's Thesis, 6 cr. Approval of major advisor is necessary.

COLLEGE OF EDUCATION

Ahmed A. Fareed, Ph.D., Professor, Dean

Sandra Styer, Ph.D., Professor, Associate Dean

The College of Education offers a range of undergraduate and graduate programs conducive to the fulfillment of the following goals:

1. Recruit and admit students who possess the qualities necessary for teaching and guiding children and youth in the developmental tasks for which schools take responsibility, and to offer appropriate training to the aspiring teachers who wish to assume that responsibility.
2. Provide leadership and assistance for enhancing the educational programs of public and private schools and other educational agencies. School and community cooperation and collaboration with the college is sought for the improvement of teacher education. Strong emphasis is given to professional development activities both on campus and at school and community-based locations.
3. Advocate, design, conduct, and evaluate innovative and experimental teacher education programs. Faculty research projects related to program development are especially encouraged.
4. Offer training for educators to develop human resources in settings such as hospitals, business, and industry where teacher certification is not required. Such programs expand the domain of education to encompass environments traditionally excluded from the curricula of teacher education.

To realize its goals, the College of Education takes an all-university approach, requiring its students to have a well-rounded general education in the liberal arts, thorough training in professional education courses, and extensive school-community clinical experiences. Students completing teacher certification programs receive entitlement to certification from the Illinois State Teacher Certification Board.

Students with degrees may complete an approved teacher certification program. Information for degreed candidates is available in the Office of the Dean, College of Education.

COURSES OF STUDY

The College offers courses of study in:

Bilingual/Bicultural Education
Counselor Education
Early Childhood Education
Educational Administration
Educational Foundations
Elementary Education
Exercise Science and Cardiac Rehabilitation
Health, Physical Education, Recreation and Athletics
Human Resource Development
Inner City Studies Education
Instructional Media
Language Arts
Reading
Secondary Education
Special Education

ACCREDITATION AND APPROVAL

In 1985, the National Council for Accreditation of Teacher Education (NCATE) conducted a thorough on-site evaluation of the College of Education and awarded full accreditation to all teacher education programs in the College of Education.

In 1981, the State Teacher Certification Board, after extensive evaluation of all College of Education certification programs as part of the State Board's Tenth Year Review, found Northeastern Illinois University in compliance with all standards and program criteria. As a result, Northeastern has full approval for all of its undergraduate and graduate certification programs for teachers, administrators, and school service personnel. In 1987, this approval was reaffirmed by the State Teacher Certification Board's full approval of Northeastern's Fifth Year Report. These certification programs are:

Early Childhood Education

Educational Administration

(Graduate level only)

Chief School Business Official
General Administrative

Elementary (K-9)

Secondary (6-12)

Art
Biology

Chemistry
 Earth Science
 English Education
 French
 Geography
 History
 Mathematics
 Music
 Physics
 Physical Education
 Social Science
 Spanish
 Speech and Performing Arts

Reading (K-12)*

(Graduate level only)

Special Education (K-12)

Learning Disabilities*
 Behavior Disorders*
 Educable Mentally Handicapped*
 Trainable Mentally Handicapped*
 (Graduate level only)

*Supervisory Endorsement Option available at Graduate level

School Service Personnel

(Graduate level only)

Guidance and Counseling—Elementary
 Guidance and Counseling—Secondary

UNDERGRADUATE MAJORS

Bilingual/Bicultural Education
 Early Childhood Education
 Elementary Education
 Human Resource Development
 Inner City Studies Education
 Leisure Studies
 Physical Education
 Physical Education (for Elementary School Teachers)
 Special Education

In order to graduate, majors not seeking certification must complete all the requirements for their academic programs and be admitted to the College of Education.

UNDERGRADUATE MINORS

The College of Education offers minor programs which supplement other academic programs offered at Northeastern. These minors include the following:

Early Childhood Education
 Hospital Play Education
 Preschool Education

Educational Foundations
 Educational Psychology
 Educational Studies
 Multicultural Education

Health, Physical Education, Recreation, and Athletics
 Health Education
 Leisure Studies
 Physical Education

Inner City Studies Education
 Inner City Careers
 Mexican/Caribbean Studies

Instructional Media

Reading

GRADUATE PROGRAMS

The College of Education offers the following graduate programs. Programs with an asterisk (*) lead to both a master's degree and Illinois state teacher certification.

Master of Education in the Teaching of
 Language Arts

Master of Science in Exercise Science
 and Cardiac Rehabilitation

Master of Arts in Educational Administration*

Master of Arts in Guidance and Counseling
 Elementary School Level*
 Secondary School Level*
 Vocational Counseling
 Community and Family Counseling

Master of Arts in Human Resource
 Development

Master of Arts in Inner City Studies

Master of Arts in Instructional Media

Master of Arts in Reading

Master of Arts in Special Education
 Early Childhood Special Education
 Educating Children with Behavior Disorders*
 Educating Handicapped Adolescents
 Teaching Children with Learning Disabilities*
 Teaching Educable Mentally Handicapped Children
 and Youth*
 Teaching the Gifted and Talented Child
 Teaching Trainable Mentally Handicapped Children
 and Youth*

ADVISEMENT

The University Advisement Center advises freshmen and sophomores who are preparing for admission to teacher education but have not yet declared a major. Students with a declared major in the College of Education should seek academic advisement from the appropriate department.

ADMISSION-RETENTION POLICIES FOR UNDERGRADUATES

Admission to Northeastern Illinois University does not automatically constitute admission to professional programs in

the College of Education. Students who major in any of the programs offered in the College of Education must be admitted to the College of Education in order to graduate. For those majoring in certification programs, admission to the College of Education is a prerequisite to entering student teaching. The deadline for admission is the last week in May for those student teaching in the Fall and the last week in September for those student teaching in the Spring semester. For students majoring in noncertification programs, the deadlines for admission to the College of Education are specified in the appropriate departmental sections of this catalog.

Admission to the College of Education should be requested after completion of 30 semester hours. Transfer students must have completed 12 of those hours at Northeastern. To apply for admission, students should contact the Office of the Dean, College of Education, room 4-044 to initiate an application file. Students who have completed application files by the 15th of each month will have their applications reviewed by the Admission, Retention, and Appeals Committee of the College of Education at its next regularly scheduled meeting. All students, including transfer students, must meet the following minimum requirements for admission:

1. Completion of 30 semester hours at the time of application. Transfer students must have completed 12 of those hours at Northeastern.
2. A cumulative grade point average of 2.50 (on a 4.0 scale) or higher at the time of application. A 2.50 cumulative grade point average must be maintained for retention.
3. Competence in oral English proficiency as evidenced by a grade of "C" or higher in an appropriate speech course or by passing an oral proficiency examination offered by the College of Education. (To meet the speech requirement by oral testing, an appointment should be made in the Office of the Dean, College of Education.)
4. Competence in written English as evidenced by passing the writing section of the University English Competence Examination. This examination is also a graduation requirement for all students at Northeastern.
5. Competence in reading as evidenced by passing the reading section of the University English Competence Examination.
6. Competence in mathematics as evidenced by an acceptable score on the mathematics test given by the College of Education.
7. A minimum grade of "C" in "professional education" and "major" courses is required for admission to or retention in the College of Education.
8. A positive recommendation from the student's major department. Students majoring in Elementary Education must also have a recommendation from the department of the second major (Inner City Studies, Physical Education, or

Special Education). Bilingual-Bicultural majors need only a recommendation from the Elementary Education Program.

An individual interview may be required with applicants requesting admission to the College of Education.

Students may be required to take examinations or submit other documentation specific to the particular teaching program and discipline in which they are enrolled. Evidence of specific behavior indicating impairment of physical or mental health which would be likely to interfere with satisfactory performance as a teacher may be considered as constituting a basis for denying admission.

University students who do not intend to major in programs offered by the College of Education but who are interested in taking education courses as electives are invited to do so without applying for admission to the College.

Students enrolled in the BOG/BA program at Northeastern who wish to pursue any of the programs within the College of Education must be admitted to the College of Education. These students must also complete all professional course requirements of their particular programs.

Students with degrees seeking certification under Illinois **House Bill 2207** must also be admitted to the College of Education. For requirements and advisement, contact the Office of the Dean, College of Education.

RETENTION AND ACADEMIC STANDING

A student admitted to the College of Education must maintain a minimum cumulative grade point average of 2.50 (on a 4.0 scale) to remain in good standing. If the cumulative grade point average drops below 2.50 the student will be placed on academic probation in the College of Education. Students are allowed one term, while on probation, to raise their cumulative grade point average to 2.50. If the cumulative grade point average is not raised to 2.50 after one term on probation, the student will not be retained in the College of Education.

A grade of "C" or higher in courses in professional education and majors within the College of Education is required for retention. Students receiving a grade lower than "C" will be placed on academic probation and will not be permitted to student teach until a grade of "C" or higher is achieved.

Students will not be permitted to student teach if they have not been admitted to the College of Education or if they are on academic probation within the College of Education.

REINSTATEMENT AND READMISSION

Students in good standing who have been admitted to the College of Education and then withdraw from the University will, upon readmission to the University, be automatically reinstated in the College of Education, if the period of withdrawal has not exceeded four years. Students who are

readmitted to the University after a period of withdrawal which exceeds four years must apply for readmission to the College of Education.

A student who has withdrawn while on academic probation or who has not been retained in the College of Education due to an insufficient G.P.A. may be reinstated after the cumulative G.P.A. has been raised to at least 2.50 (on a 4.0 scale). A written appeal to the College of Education must be submitted. It is the responsibility of the student to notify the Office of the Dean, College of Education, of any intention to withdraw from the College.

CLINICAL EXPERIENCES AND STUDENT TEACHING

Students who are matriculating in certification programs are required to complete at least 100 hours of clinical experiences prior to student teaching and must also satisfactorily complete student teaching (and practice teaching in some programs). For more detailed and specific information, please refer to the section in the catalog on Clinical Experiences and Student Teaching.

GRADUATION REQUIREMENTS

To be eligible for graduation with a recommendation for entitlement for teacher certification through the College of Education, all students must be admitted to the College, maintain the admission standards, successfully complete the required courses in professional education and all requirements of their academic program, pass the United States and Illinois Constitution Examinations and meet all University graduation requirements. (Students may also satisfy the constitution requirements by completing an approved political science course. Contact the Political Science department for course information.)

In addition, students pursuing teacher education programs in early childhood education and elementary education are required to complete at least 78 hours of general education course work in addition to professional education requirements. Those pursuing teacher education programs in secondary education are required to complete at least 42 hours of general education course work. For further information concerning the general education requirements, students should consult with the respective College of Education departments offering teacher certification programs. **Students graduating after June 30, 1992 must meet the new ISBE general education requirements.** Please check with your department for specific details.

Illinois Certification Testing

After July 1, 1988, all students seeking early childhood, elementary, special, high school, school service personnel, or administrative certificates in Illinois must pass: 1) a test of basic skills and 2) a test of subject-matter knowledge in each area in which certification is sought. This requirement is mandated by the Illinois Education Reform Act. The tests

are administered regionally at four regularly scheduled times per year. The Illinois State Board of Education advises persons to take the tests as soon as possible. Tests not passed may be retaken as often as necessary at any of the regularly scheduled times. Registration Bulletins and Study Guides for the tests are available in department offices.

THE CHICAGO TEACHERS' CENTER

Jerry B. Olson, Ph.D., Professor, Associate Dean
Barbara Baldini, M.A., Curriculum Coordinator
Mary Klemundt, M.A., Program Administration Coordinator
Barbara Odean, B.S., Curriculum Coordinator
Christine Wedam, M.S.Ed., Center Coordinator

The Chicago Teachers' Center is an academic unit within the College of Education offering professional development programs cooperatively designed and led by Chicago elementary and secondary school teachers as well as faculty from the College of Education. The center is governed by a policy board comprised of teachers, representatives from public and private school boards, and faculty from Northeastern Illinois University. Collaborative planning, implementation, and governance ensure that in-service programs coincide with teacher-perceived needs and that theory and practice are successfully integrated. The center staff works with classroom teachers and Northeastern Illinois University students to provide professional support services at an off-campus center and through various outreach programs.

Center Site

Located at a convenient site in Alvernia High School (3901 N. Ridgeway Ave.), the Teachers' Center is open Monday through Wednesday and on Saturdays. There, teachers can stop to share ideas with each other; consult with center staff; attend workshops, seminars, or courses; and take advantage of many idea-books, teacher-made materials, and curricular units. Supplies and equipment are available (including laminator, book-binder, copier, ditto, and thermo-fax machines) for those who wish to experiment with constructing curricular materials.

Outreach Program

Since professional development is particularly effective when it is school-based, the Chicago Teachers' Center has focused many of its programs at school sites in the Chicago metropolitan area. Activities in the outreach program involve visits to schools, meetings with teachers to plan in-service workshops during school hours, working with clusters of teachers, offering specially-designed courses at schools, applying research to instructional problems, coordinating efforts to locate community resources and creating in-depth staff development programs at target schools.

Services for Northeastern Students

In addition, the Teachers' Center provides services to enrich the educational experience of undergraduate and graduate students at Northeastern. At the Center site students gain experience in preparing curricular materials and interact

informally with experienced teachers. Opportunities are available for students to learn about exemplary local teaching practices through video-tapes and center exhibits.

CLINICAL EXPERIENCES AND STUDENT TEACHING

Bert Abell, M.S., Professor, Coordinator
of Student Teaching
Janet Bercik, Ed.D., Assistant Professor,
Coordinator of Clinical Experiences

Clinical Experiences

All students seeking **Teacher Certification** in the **State of Illinois** must complete a minimum of 100 clock hours of clinical experiences working with children or young adults. These clinical experiences must be completed (1) prior to student teaching, (2) in an approved school, and (3) under the supervision of a qualified cooperating teacher.

Procedure:

- Applications are available in the Office of Clinical Experiences and Student Teaching, CLS 4023.
- The forms must be typed and returned to CLS 4023.
- It is recommended that applications are made during advance registration because the process takes approximately 4-6 weeks before actual placement.
- Current TB tests must be on file in our office prior to this experience.

Student Teaching

In addition to completing clinical experiences, students must also satisfy the following requirements to be eligible for student teaching:

Admission to the College of Education

Prior to student teaching, students must be admitted to the College of Education. The admission deadlines follow:

Student Teaching Assignment	Deadlines
Fall	Thursday of the last week in May
Spring	Thursday of the last week in September

For information about admission, please contact the Office of the Dean, College of Education, Room 4-044, Classroom Building

Minimum Hours of Credit and Departmental Requirements

- Undergraduate students must have completed at least 90 hours of credit.
- Degreed students and undergraduate students must satisfy all course and program requirements established as prerequisites for student teaching.

Department Approval

Students must have the approval of the department in which student teaching will be completed. A department recommendation for admission to the College of Education does not ensure the department will also approve admission to student teaching. A student who has exhibited (in major or professional courses or in clinical experiences) behavior judged inappropriate to a candidate for the teaching profession following admission to the College of Education may be denied approval by the department for admission to student teaching. All students must follow their departments' procedures concerning admission to student teaching. Students should check with their program advisor and/or the Office of Clinical Experience and Student Teaching for information on required forms and procedures.

Grade Point Average

- A grade point average of 2.50 (on a 4.0 scale) or higher must be maintained for eligibility to student teach.
- The student must earn a grade of "C" or higher in all courses determining eligibility for student teaching.

Formal Application to Student Teach

Students must make formal application to the Office of Clinical Experiences and Student Teaching. Student teaching orientation meetings are held approximately one year prior to the term of student teaching. Students should keep alert for the posting of meeting dates; attendance is mandatory. At these orientation meetings students receive information about application procedures, and the formal application process is initiated.

Deadlines for submission of student teaching applications (including all transcripts, departmental authorization and a TB test report) are as follows:

Classification	Teaching Assignment	Deadlines
All students except those entering in the Spring Term preceding Fall student teaching	Fall	Friday of the first week in November
Degreed students entering in the Spring Term	Fall	Friday of the first week in February
All students except those entering after May of the year	Spring	Friday of the last week in February
Degreed students entering after May of the year	Spring	Friday of the last week in July

Placement and the Supervisory Process

Students are given the option of student teaching in the following:

1. Chicago Public Schools
2. Suburban School Districts
3. Parochial Schools (state certified)
4. Private Schools (state certified)

The coordinator of student teaching confers with respective department chairpersons, program coordinators, and/or university supervisors to determine placement of the prospective student teacher.

Placement requests for student teaching sites are sent by the Office of Clinical Experiences and Student Teaching to the school or school district. When confirmation is received that the student has been accepted by the school, the student is notified of the assignment. Please be aware that some school districts are late in confirming placements. As a consequence, some students will receive student teaching placement notices very close to the time student teaching begins. Such delays should be no cause for alarm; every eligible student is assured of placement.

To receive credit for student teaching the student **must** register for the appropriate student teaching course through Northeastern's formal registration procedures.

Student teachers attend an **orientation** session at Northeastern prior to student teaching. Orientation sessions are conducted by the student teaching supervisor and the Office of Clinical Experiences and Student Teaching. Notification is sent to the student regarding date, time and place of the orientation session. **Attendance at an orientation session is mandatory in order to student teach.**

In addition to supervising the student teacher, the university supervisor also conducts weekly seminars for all student teachers whom he/she supervises.

The University supervisor, with input from the cooperating teacher or teachers to whom student teachers are assigned, is responsible for evaluation of the student teacher and assignment of the final course grade. **To be entitled for certification, a student must earn a grade of "B" or better in student teaching.**

University supervisors record their evaluation of each student teacher with the Office of Career Development and Placement, Room B-117 in the B-Wing. The student teacher must provide the supervisor with the evaluation form included in the placement packet distributed by the Office of Career Development and Placement. The office maintains evaluation records for all students who have completed student teaching and makes these records available to prospective employers upon student request. This office also communicates up-to-date information about job openings in schools.

ENTITLEMENT AND CERTIFICATION PROCEDURES

Once a student has successfully completed student teaching, he/she must follow entitlement procedures required for

obtaining certification. Prior to graduation, the undergraduate student receives an Entitlement Procedure Instruction sheet in the packet mailed to prospective graduates by the Admissions and Records Office. This sheet specifies in detail the process of entitlement and certification. Degreed students can get this instruction sheet from the Office of Admissions and Records or the Office of Clinical Experiences and Student Teaching.

DEPARTMENTS/PROGRAMS

BILINGUAL/BICULTURAL EDUCATION

Maria Korkatsch-Groszko, Ph.D., Associate Professor,
Coordinator

(See listing of faculty in the Department of Curriculum and Instruction section of this catalog.)

A major in Bilingual/Bicultural Education leading to a Bachelor of Arts degree is offered by and housed in the Department of Curriculum and Instruction. (See the Curriculum and Instruction section of this catalog.) At present, the major is reserved for students who have demonstrated proficiency in written and spoken Spanish. The required level of proficiency may be attained while students are enrolled in the program.

Program goals are: to develop skills, insights, and attitudes crucial to effective communication in teaching the bilingual-bicultural child; to understand the psychological and sociological settings pertinent to bilingual-bicultural children and their cultural differences; to become aware of the ongoing multilingual education programs; to become conversant in both first and second languages in teaching subject matter areas; to realize the importance of the ethnic-cultural ties to the learning process; and to develop the necessary pedagogical competencies for the teaching profession through the bilingual-bicultural major.

Students completing the Bilingual/Bicultural Education major **must** complete a second major in Elementary Education to be entitled for certification as elementary school teachers. (See the Elementary Education section of this catalog.)

The Bilingual/Bicultural Education major consists of twenty-five (25) credit hours distributed as follows:

Required Courses:

MUS-391 Contemporary Music Education in Grades Kindergarten-Six	3 cr.
LING-304 Teaching English as a Second Language	3 cr.

SOC-316 Race and Ethnic Relations.....3 cr.
HPER-PEMA-253 Social Dance and Latin

American Rhythms.....1 cr.
C&I-BLBC-338 Bilingualism and Education3 cr.
C&I-BLBC-339 Methods of Teaching Spanish
Language Arts in the Elementary School3 cr.

Choose two of the following:..... 6 cr.
FL-SPAN-331 Hispanic World Cultures3 cr.
FL-SPAN-364 Spanish-Americans of Chicago3 cr.
HIST-205 Latin American History Since 1825.....3 cr.

Choose one of the following:.....3 cr.
ANTH-308 Peoples of Mexico, Central America
and the Caribbean3 cr.
ANTH-233 Racial and Cultural Minorities3 cr.
G&ES-302 Regional Geography: Caribbean.....3 cr.
Total 25 cr.

NOTE: In addition to the courses listed below, please consult the pertinent sections of this catalog for other required and elective courses in the Bilingual/Bicultural Education major.

COURSE OFFERINGS

C&I-BLBC-338 Bilingualism and Education, 3 cr. Bilingualism and education in different parts of the world, its sudden importance in the United States as a method of teaching the Spanish-speaking child in the metropolitan areas to become self-directing in a culture different from his own. Emphasis will be placed upon the education problems of large ethnic groups in urban centers, such as Puerto Ricans, Mexicans, and Cubans. **Prereq.:** admission to Bilingual/Bicultural Education Program.

C&I-BLBC-339 Methods of Teaching Spanish Language Arts in the Elementary School, 3 cr. Exploratory and systematic to the study of language arts in the Spanish language and its implications in the methodology of the bilingual/bicultural classroom. Analyzes all major components stressing current trends, issues, and innovations. **Prereq.:** admission to the Bilingual/Bicultural Education Program.

C&I-BLBC-340 Assessment in Bilingual Classrooms, 3 cr. Study of recent developments and trends in the assessment of language in the context of bilingual education. Analysis and evaluation of bilingual tests in current use. Review of relevant assessment procedures. **Prereq.:** admission to the Bilingual/Bicultural Education program.

C&I-BLBC-341 Methods and Materials for Teaching Limited-English-Proficient Students, 3 cr. Presents strategies and theoretical models to develop teacher awareness in those areas that concern the specialized bilingual educator. There is an emphasis on the identification and location of relevant instructional materials which address bilingual education as a method of instruction for culturally and linguistically diverse children with limited English language skills. Participants are expected to apply curricular models and develop pedagogical skills in the areas of task analysis, instructional assessment, and critical evaluation of instructional materials

to meet the needs of bilingual students. **Prereq.:** C&I-BLBC-338, C&I-BLBC-340, and a methods course.

C&I-BLBC-342 Methods of Teaching Language Diverse Students, 3 cr. Presents detailed treatment of issues concerning the instruction of diverse language groups such as Hispanics, Asians, East Indian, Arabics, and Middle Easterners within the differentiated curriculum in American schools. Focuses on contrastive and analytical techniques for studying language and culture related to improving instruction in the subject areas. **Prereq.:** BLBC 338, LING 304, and demonstrated proficiency in English and the target language.

COUNSELOR EDUCATION

Edward Brogly, Ph.D., Professor
James Fruehling, Ph.D., Professor
Nan Giblin, Ph.D., Associate Professor, Chairperson
Jane Hawley, Ph.D., Professor
Noah Inbody, Ed.D., Professor
Linda Keel, Ph.D., Associate Professor
Alice Murata, Ph.D., Professor
Charles Pistorio, Ph.D., Assistant Professor
Francis Vogel, Ph.D., Professor

The mission of the Counselor Education Department is to prepare individuals from a variety of educational backgrounds as professionally, competent school counselors, vocational counselors, community and family counselors at the graduate level.

The program's objectives focus on knowledge and skill competence in eight professionally defined areas: Professional orientation; human growth and development; social and cultural foundations; helping relationships; group approaches; career development; appraisal; and research skills.

In addition to didactic courses, laboratory and practicum experiences prompt the personal and professional development of prospective counselors. It is required that students consult their program advisors regarding course selection and sequence.

GRADUATE PROGRAM

Master of Arts in Guidance and Counseling

There are four specialized sequences offered within the Department of Counselor Education:

1. Elementary School Counseling
2. Secondary School Counseling
3. Vocational Counseling
4. Community and Family Counseling

The basic departmental academic requirements for all four sequences are:

1. Admission to the graduate degree program in the Department of Counselor Education based upon an analysis of the academic and personal potential of the individual.
2. Completion of a minimum of 36 credit hours of prescribed course work including six credit hours of practicum.
3. Successful completion of the departmental proficiency examination.
4. Completion of all requirements and stipulations prescribed by the Graduate College.

Specific Sequence Requirements Elementary and Secondary School Counseling:

1. Applicants must hold a current standard state or permanent Chicago teaching certificate. A Chicago certificate dating back more than three years must be accompanied by a letter from the principal of the school in which the applicant is employed, stating that the applicant is assigned and teaching on a permanent certificate.
2. Applicants must have completed at least one year of satisfactory teaching experience as an assigned teacher after receipt of the standard state or permanent Chicago teaching certificate. This teaching experience must be at the appropriate certificate level.
3. Applicants for the elementary sequence must have satisfactorily completed one course in educational psychology and one course in reading methods or equivalent.
4. Applicants for the secondary sequence must have satisfactorily completed one course in general psychology and one course in educational psychology or equivalent.
5. At the time of application, two letters of recommendation from persons who are familiar with the applicant's personal and professional qualifications are required.

Course requirements in both the elementary and secondary school sequences are designed to meet the needs of counselors working in school settings. Only persons with teaching certificates are admitted to these two programs. Students who successfully complete the elementary or secondary sequence of courses for the Master of Arts in Guidance and Counseling, and who have a current Illinois teaching certificate, are also eligible to apply for the School Service Personnel Certificate: Guidance.

Elementary School Sequence

Required Courses:

COUN-401	The Counseling Profession	3 cr.
*SPED-304	Psychology of Exceptional Children	3 cr.
COUN-421	Evaluation Techniques for Counselors	3 cr.
**PSYC-311	Psychology of Personality	3 cr.
COUN-464	Frameworks for Counseling	3 cr.
Subtotal		15 cr.

*See Department of Special Education
**See Department of Psychology

Required Advanced Courses: (Candidacy a prerequisite)

COUN-456	Career Development: Elementary Schools	3 cr.
COUN-461	Research Seminar for Counselors	3 cr.
COUN-462	Practicum I: School Counseling	3 cr.
COUN-463	Practicum II: School Counseling	3 cr.
Subtotal		12 cr.

Electives:

An additional nine credit hours to be selected in consultation with a department advisor. (See general elective section below for choices.)

Total hours required for degree: 36 cr.

Secondary School Sequence

Required Courses:

COUN-401	The Counseling Profession	3 cr.
**PSYC-329	Adolescent Psychology	3 cr.
COUN-421	Evaluation Techniques for Counselors	3 cr.
**PSYC-311	Psychology of Personality	3 cr.
COUN-464	Frameworks for Counseling	3 cr.
Subtotal		15 cr.

Required Advanced Courses: (Candidacy a prerequisite)

COUN-457	Career Development: Secondary Schools	3 cr.
COUN-461	Research Seminar for Counselors	3 cr.
COUN-462	Practicum I: School Counseling	3 cr.
COUN-463	Practicum II: School Counseling	3 cr.
Subtotal		12 cr.

**See Department of Psychology

Electives:

An additional nine credit hours to be selected in consultation with a departmental advisor. (See general elective section below for choices.)

Total hours required for degree: 36 cr.

Vocational Counseling

Applicants must have:

1. One year of appropriate full-time work experience,
2. Six credit hours of psychology in topics appropriate to the student's vocational goal, and
3. One letter of recommendation from an employer. This letter should be mailed by the referent directly to the Graduate College.

Courses in the vocational counseling sequence are designed to prepare individuals who plan to work in business and industry, employee assistance programs, vocational agencies, employment services, and rehabilitation agencies. The

completion of this sequence does not qualify an individual for certification as an elementary or secondary school counselor.

Required Courses:

COUN-401	The Counseling Profession	3 cr.
COUN-421	Evaluation Techniques for Counselors	3 cr.
**PSYC-311	Psychology of Personality	3 cr.
COUN-464	Frameworks for Counseling	3 cr.
COUN-465	Individual Counseling Skills	3 cr.
Subtotal		15 cr.

Required Advanced Courses: (Candidacy a prerequisite)

COUN-467	Adult Vocational Development	3 cr.
COUN-461	Research Seminar for Counselors	3 cr.
COUN-471	Practicum I: Counseling	3 cr.
COUN-472	Practicum II: Counseling	3 cr.
Subtotal		12 cr.

**See Department of Psychology

Electives:

An additional nine credit hours to be selected in consultation with a department advisor. (See general elective section below for choices.)

Total hours required for degree: 36 cr.

Community and Family Counseling

Applicants must have:

1. One year of appropriate full-time work experience,
2. Six credit hours of psychology in topics appropriate to the student's vocational goal, and
3. One letter of recommendation from an employer. This letter should be mailed by the referent directly to the Graduate College.

The community and family counseling sequence is designed to prepare individuals to function as counselors in community mental health centers, hospitals, crisis centers, court services, and aging/retirement centers. The completion of this sequence does not qualify an individual for certification as an elementary or secondary school counselor.

Required Courses:

COUN-401	The Counseling Profession	3 cr.
COUN-421	Evaluation Techniques for Counselors	3 cr.
COUN-464	Frameworks for Counseling	3 cr.
COUN-465	Individual Counseling Skills	3 cr.
COUN-473	Introduction to Family Counseling	3 cr.
Subtotal		15 cr.

Required Advanced Courses: (Candidacy a prerequisite)

COUN-475	Community Counseling	3 cr.
COUN-461	Research Seminar for Counselors	3 cr.
COUN-471	Practicum I: Counseling	3 cr.

COUN-472	Practicum II: Counseling	3 cr.
Subtotal		12 cr.

Electives:

An additional nine credit hours to be selected in consultation with a department advisor. (See general elective section below for choices)

Total hours required for degree: 36 cr.

General Electives

The nine hours of elective credit required in each of the above four sequences must be selected in consultation with a department advisor from the following courses:

COUN-321	Diagnosis and Treatment of Reading Difficulties	3 cr.
COUN-413	Group Counseling	3 cr.
COUN-458	The School Guidance Program	3 cr.
COUN-465	Individual Counseling Skills	3 cr.
COUN-468	Seminar in Guidance and Personnel Work	3 cr.
A-Advanced Group Leadership		
B-Advanced Counseling		
C-Advanced Evaluation Techniques		
G-Advanced Research		
H-Student Personnel Work in Higher Education		
K-Counseling the Gifted		

COUN-473	Introduction to Family Counseling	3 cr.
COUN-474	Advanced Marriage and Family Counseling	3 cr.
COUN-475	Community Counseling	3 cr.
COUN-476	Grief Counseling	3 cr.
COUN-477	Current Issues in Marriage and Family Therapy	3 cr.
COUN-478	Internship: Marriage and Family Counseling	3 cr.
COUN-479	Supervision: Marriage and Family Counseling	3 cr.
COUN-480	Case Study Techniques	3 cr.
COUN-481	Stress Management Counseling	3 cr.
COUN-482	Counseling in Business and Industry	3 cr.
COUN-483	Counseling for Alcoholism and Chemical Dependency	3 cr.
COUN-484	Advanced Counseling for Chemical Dependency	3 cr.
PSYC-312	Abnormal Psychology	3 cr.

Additional Requirements:

1. Practicum

Practicum I and Practicum II are taken concurrently by all students majoring in any of the four Guidance and Counseling sequences. The practicum experience provides students with opportunities to practice newly acquired skills and theories in settings appropriate to their vocational objectives. It

requires that students be available during the day for work assignments and for the accompanying weekly seminar. Practicum placements are made by the Department of Counselor Education. They are limited in number so students should submit an application for practicum at least six months in advance. (27 hours must be completed before beginning practicum.)

An on-the-job practicum can often be arranged for students employed as counselors. (A minimum of 24 hours must be completed before beginning an on-the-job practicum.)

2. Clinical Experiences

Each student will be required to complete certain clinical experiences designed to provide useful contacts with client and professional groups. See "The Handbook of Clinical Experiences" which is available in the Department office for additional information.

3. Research

A research paper is required, and students fulfill this requirement by completing COUN-461, the Research Seminar course. Consult your advisor.

4. Departmental Proficiency Examination

All candidates will be required to pass a comprehensive examination. Candidates may take the examination in the term following the one in which all course requirements have been completed. Students must apply to the department to take this examination.

COURSE OFFERINGS

COUN-321 Diagnosis and Treatment of Reading Difficulties, 3 cr. Survey of diagnostic procedures; identification of reader's problems through diagnosis; procedures and techniques for remediation of reading problems for elementary students, secondary students, and adults. Actual practice by completion of a case study. *Prereq.: ELED-306 or consent of instructor.*

COUN-401 The Counseling Profession, 3 cr. An orientation to the counseling profession and an opportunity for understanding oneself as a counselor. The roles, objectives, and functions of professional counselors as well as the history and evolution of the profession and current standards for ethical and legal behaviors, professional preparation, and credentialing will be studied. Students will also become familiar with the objectives, benefits, and services of professional counseling organizations and journals.

COUN-413 Group Counseling, 3 cr. Theories of group process, types of groups, ethics, and leadership skills are studied and applied. Supervised participation in and leadership of groups is required. *Prereq.: graduate standing and COUN-465.*

COUN-421 Evaluation Techniques for Counselors, 3 cr. Principles of test construction, basic statistical concepts, study of commonly used standardized tests, and other evaluative procedures. Interpretations of test data are an integral part of this course. *Prereq.: graduate standing.*

COUN-456 Career Development: Elementary Schools, 3 cr. Examines the role of the school counselor in facilitating developmental self-understanding and career exploration through the use of the total learning environment. The information service, consultation and referral skills, career education, and use of community and family resources are emphasized. *Prereq.: acceptance to master's degree candidacy in guidance and counseling—elementary school level.*

COUN-457 Career Development: Secondary Schools, 3 cr. The role of the counselor is explored with emphasis on theories of career choice, career education, and career guidance, consultation and referral. Sources of occupational, educational, and personal-social information are included. Interpretation of college entrance examination scores is also covered. *Prereq.: acceptance to master's degree candidacy in guidance and counseling—secondary school level.*

COUN-458 The School Guidance Program, 3 cr. Comprehensive overview of the organization, administration, and supervision of guidance in the elementary and secondary school. *Prereq.: graduate standing and COUN-401.*

COUN-461 Research Seminar in Counseling, 3 cr. Appropriate research methods and statistical treatments used in studying counseling related problems are presented. Critical evaluation of research is explored. A research project is an integral aspect of this course. *Prereq.: master's degree candidacy in guidance and counseling and COUN-421.*

COUN-462 Practicum I: School Counseling, 3 cr. Introductory supervised professional experiences in guidance and counseling in appropriate school settings; seminar discussion. *Prereq.: master's degree candidacy in guidance and counseling and approval of department chairperson.*

COUN-463 Practicum II: School Counseling, 3 cr. Advanced supervised professional experiences in guidance and counseling in appropriate school settings; seminar discussion. *Prereq.: master's degree candidacy in guidance and counseling and approval of department chairperson.*

COUN-464 Frameworks for Counseling, 3 cr. An overview of the various theories of counseling and their associated techniques. Students will study a range of theories and their applications in various professional settings and will be required to synthesize their own personal approach. *Prereq.: graduate standing.*

COUN-465 Individual Counseling Skills, 3 cr. Techniques and skills for counseling the individual are examined and practiced, including verbal and non-verbal interactions and stages of the counseling process. Students will counsel clients under supervision. *Prereq.: graduate standing, COUN-401, and COUN-464.*

COUN-466 Independent Study in Guidance and Personnel Work, 3 cr. Intensive guided study in selected area of guidance and personnel work. Consultation with instructor prior to registration is mandatory. *Prereq.: graduate standing and consent of instructor.*

COUN-467 Adult Vocational Development, 3 cr. A critical examination of existing theories of vocational development, the meaning of work, occupational trends, and educational-occupational-social information and their application to the guidance and counseling process. Research

pertaining to vocational development, information services, the world of work, and career education will be explored and analyzed. *Prereq.: master's degree candidacy in guidance and counseling, COUN-401, and consent of instructor.*

COUN-468 Seminar in Guidance and Personnel Work, 3 cr. See the subtitles in electives listing. As these subtitles indicate, these courses provide opportunities for detailed analysis of various topics focusing on current trends and/or issues. The varied interests of the students are considered in relation to the activities and assignments. *Prereq.: master's degree candidacy in guidance and counseling or consent of instructor.*

COUN-469 Independent Study in Guidance and Personnel Work, 1 cr. Intensive guided study in selected areas of guidance and personnel work. Consultation with instructor prior to registration is mandatory. *Prereq.: graduate standing and consent of instructor.*

COUN-470 Independent Study in Guidance and Personnel Work, 2 cr. (See COUN-469 for description.)

COUN-471 Practicum I: Counseling, 3 cr. Introductory supervised professional experiences in guidance and counseling in appropriate setting; seminar discussion. Appropriate settings include: (1) mental health clinics, (2) vocational agencies, (3) correctional agencies, (4) community colleges, (5) community counseling centers, (6) vocational or trade schools, and (7) universities. *Prereq.: master's degree candidacy in guidance and counseling and approval of department chairperson.*

COUN-472 Practicum II: Counseling, 3 cr. A continuation of supervised professional experiences in an appropriate setting; seminar discussion. Appropriate settings include: (1) mental health clinics, (2) vocational agencies, (3) correctional agencies, (4) community colleges, (5) community counseling centers, (6) vocational or trade schools, and (7) universities. *Prereq.: master's degree candidacy in guidance and counseling and approval of department chairperson.*

COUN-473 Introduction to Family Counseling, 3 cr. An introduction to the major theories and techniques of family counseling. Lectures, student research, and role playing are utilized as presentation forms. *Prereq.: graduate standing, COUN-401 and COUN-464.*

COUN-474 Advanced Marriage and Family Counseling, 3 cr. An advanced experience in Marriage and Family Counseling. The focus is on developing a personal model of counseling and experiencing the total therapeutic process. Diagnostic skills are emphasized, as well as, case analysis, and the exploration of ancillary relationship strategies, (e.g. divorce counseling). *Prereq.: graduate standing and COUN-473.*

COUN-475 Community Counseling, 3 cr. A theoretical framework that focuses on meeting the counseling needs of identified target populations in a programmatic fashion. Prevention, crisis intervention and community based interventions will be presented. Specific skills in target population identification, need assessment, goal formulation, intervention design and program evaluation will be developed. *Prereq.: graduate standing, COUN-401, and COUN-464.*

COUN-476 Grief Counseling, 3 cr. An overview of contemporary attitudes regarding loss and death and their implications for the counselor's personal reaction to death related events. Students will become familiar with the broad outlines

of the grieving process and the physical and emotional consequences associated with maladaptive grief. Specific issues raised by different types of loss will also be discussed. Crisis intervention skills, counseling techniques, and community mutual aid efforts to facilitate a healthy grieving process will also be presented. *Prereq.: graduate standing, COUN-401, and COUN-464.*

COUN-477 Current Issues in Marriage and Family Therapy, 3 cr. Presents detailed treatment of selected issues and concerns in marriage and family therapy. *Prereq.: graduate standing and COUN-473 or equivalent.*

COUN-478 Internship: Marriage and Family Therapy, 3 cr. Direct counseling of couples and families under supervision; review of session video tapes; readings in marriage and family counseling. *Prereq.: COUN-474.*

COUN-479 Supervision: Marriage and Family Therapy, 3 cr. Advanced training in supervision of marriage and family therapists; review of session video tapes; readings in counseling supervision. *Prereq.: COUN-478 or equivalent.*

COUN-480 Case Study Techniques, 3 cr. A highly concentrated approach to understanding human beings and planning to assist them in solving their problems. Skills of listening, interpreting, applying and writing are stressed. *Prereq.: graduate standing and COUN-464.*

COUN-481 Stress Management Counseling, 3 cr. This course is for counselors serving clients in a variety of settings. Its holistic focus is upon stress and burnout from proactive and reactive perspectives. Student learning activities are didactic and experiential. Each student will design, implement and evaluate a personal stress management program appropriate to his/her own needs and resources. Student participation is required in research, laboratory and support group activities dealing with aspects of stress management. *Prereq.: graduate standing and COUN-401 or consent of instructor.*

COUN-482 Counseling in Business and Industry, 3 cr. This course is designed for counselor education students in the Vocational Sequence. The focus will be on the counseling needs in business and industry. The course will build on the work done in COUN-467 Adult Vocational Development, with the emphasis on the career counseling needs of the adult worker. This course should be of value to students seeking careers in the business world, community colleges, and vocational agencies. *Prereq.: graduate standing and COUN-467.*

COUN-483 Counseling for Alcohol and Chemical Dependency, 3 cr. The knowledge base required for certification in alcohol and/or drug counseling in Illinois will be covered. The approach to addictions will be through the alcoholism model and will include such areas as medical complications, symptoms, assessment, definitions, denial, relapse, special populations, treatment, education, and counseling attitudes and skills unique to addiction counseling. Major drug categories will be reviewed from the standpoint of physiological effects, and treatment. *Prereq.: graduate standing, COUN-401 and COUN-464.*

COUN-484 Advanced Counseling for Chemical Dependency, 3 cr. Participation in various aspects of a treatment program, including admission interviews, evaluation of

patients, short and long range planning with patients, dealing with denial and relapse through counseling, family interventions, and counseling with and receiving feedback from volunteer recovering addiction patients. A needs assessment among class members will determine part of this course.

Prereq.: graduate standing and COUN-483 or consent of instructor.

CURRICULUM AND INSTRUCTION

Bertram I. Abell, M.S., Professor
Harvey B. Barrett, Ed.D., Assistant Professor
Michael J. Belica, Ed.D., Professor, Chairperson
Janet Bercik, Ed.D., Assistant Professor
Sherman Beverly, Ph.D., Professor
Mary Louise Burger, Ed.D., Professor
Murrell Duster, M.Ed., Assistant Professor
Frederick O. Flener, Ph.D., Professor
Mary Anne Fowler, Ed.D., Professor
Charles Howard, M.A., Assistant Professor
Margrethe G. Isaac, Ph.D., Associate Professor
Claire M. Jacobs, Ed.D., Professor
Maria Korkatsch-Groszko, Ph.D., Associate Professor
Elizabeth Landerholm, Ed.D., Associate Professor
Margaret Lindman, Ed.D., Professor
James R. Lockwood, Ph.D., Professor
Patricia L. Mather, Ph.D., Associate Professor
Beverly Otto, Ph.D., Assistant Professor
Betty J. Paden, Ed.D., Professor
Edward A. Robinson, Ph.D., Professor
Ronald A. Sait, Ed.D., Professor
Sandra Styer, Ph.D., Professor
Christine C. Swarm, Ed.D., Professor
Rodolfo Vilaro, M.A., Assistant Professor
Vivian A. Walkosz, Ed.D., Professor

The Department of Curriculum and Instruction offers a variety of undergraduate and graduate programs for pre-service and in-service teachers. While some department programs are organized with an orientation to preparing teachers for specific age/grade levels, it is the departmental goal to develop programs with a broader and more integrated perspective which acknowledges the theoretical base common to teacher education programs for all age levels. To achieve this goal, the resources of all of the following programs in the Department of Curriculum and Instruction are being utilized: Undergraduate Program in Bilingual/Bicultural Education Undergraduate Program in Early Childhood Education Undergraduate Program in Elementary Education Undergraduate Program in Secondary Education Undergraduate and Graduate Programs in Instructional Media Graduate Program in the Teaching of Language Arts

Bilingual/Bicultural Education

The department offers a major in Bilingual/Bicultural Education leading to a Bachelor of Arts degree. The program is designed to prepare students to teach in bilingual/bicultural (Spanish/English) classrooms. Students with a demonstrated competence in Spanish complete required course work in areas such as bilingual education and teaching English as a second language. Selected courses in history, anthropology, and foreign language provide an understanding of the cultural background of Spanish-speaking students.

The Bilingual/Bicultural Education major is taken concurrently with the Elementary Education major which leads to certification at the elementary (K-9) level.

For specific requirements and further information please see the Bilingual/Bicultural Education section of this catalog.

Early Childhood Education

An undergraduate major in Early Childhood Education is offered by the Department of Curriculum and Instruction. Students seeking the Bachelor of Arts degree in Early Childhood Education and the Illinois Standard Early Childhood Certificate, Type 04, must complete the following: Early Childhood Education Major, an approved minor, the UNI general education program and additional required general education coursework. The Department also offers a minor in Pre-school Education and a minor in Hospital Play Education.

For specific requirements and further information please refer to the Early Childhood Education section of this catalog.

Elementary Education

The Curriculum and Instruction Department offers a major in Elementary Education leading to a Bachelor of Arts degree. The Elementary Education major must be taken in conjunction with an approved minor or a second major and leads to entitlement for the Illinois Standard Elementary Certificate. Ten minors and five second majors are approved to be taken in conjunction with the Elementary Education major. Such minor/majors provide students with the opportunity to develop a second area of professional competence.

For specific requirements and further details, please see the Elementary Education section of this catalog.

Secondary Education

The Department of Curriculum and Instruction offers a professional education sequence in Secondary Education leading to entitlement in fourteen certification programs at the secondary level. In conjunction with the professional sequence, students must complete one of fifteen majors offered by the College of Arts and Sciences and the College of Education. This sequence satisfies the university's requirement for an area of study in addition to the major. This sequence provides students with courses in educational foundations, curriculum, and teaching methods as well as

clinical experiences and student teaching required for the Illinois Standard High School Certificate.

For specific requirements and further information, please consult the Secondary Education section of this catalog.

Instructional Media

Both undergraduate and graduate programs in Instructional Media are housed in the Department of Curriculum and Instruction. An undergraduate Minor in Instructional Media and a Master of Arts in Instructional Media are offered to prepare personnel such as school librarians, audio-visual coordinators and instructional media specialists. The Instructional Media program also has responsibility for preparing students in the use of microcomputers in school settings.

For specific requirements and further details, please consult the Instructional Media section of this catalog.

Language Arts

A Master of Education degree program in the Teaching of Language Arts is also housed in the Department of Curriculum and Instruction. The degree offers sequences for both elementary and secondary classroom teachers. This interdisciplinary program allows students to construct an individual program which will most effectively meet their needs as classroom teachers. The program's ongoing cooperative relationships with the Departments of English, Linguistics, Reading, and Speech and Performing Arts support this effort.

For specific requirements and additional information, please consult the Language Arts section of this catalog.

COURSE OFFERINGS

Please note that course offerings in the Department of Curriculum and Instruction are listed under the appropriate sections delineating the specific Curriculum and Instruction programs in this catalog.

EARLY CHILDHOOD EDUCATION

Mary Louise Burger, Ed.D., Professor, Coordinator

(See listing of faculty in the Department of Curriculum and Instruction section of this catalog.)

The Early Childhood Education Program, which is housed in the Department of Curriculum and Instruction, offers courses of study leading to the Bachelor of Arts degree. The major in Early Childhood Education (43 credit hours) includes required courses (40 credit hours) plus 3 credit hours of electives selected from a block of specified courses. A minor in preschool education (18 credit hours) and a hospital play education (18 credit hours) minor are also offered by the department.

In completing the undergraduate major in Early Childhood Education, students will become knowledgeable of the diverse philosophies and models of early childhood curricula, identify the instructional needs of children in multicultural groups and of exceptional children mainstreamed into the regular classrooms; acquire skill in designing and implementing curriculum in early childhood and primary programs in all subject matter areas; become knowledgeable of the role of informal and formal instruction in the child's acquisition and development of literacy skills; acquire skill in using diagnostic and assessment techniques for evaluation as a basis for curriculum planning; and develop competence in utilizing positive classroom management procedures.

UNDERGRADUATE PROGRAMS

Major in Early Childhood Education for the Bachelor of Arts Degree

Required Courses:

EDFN-302	Philosophical and Historical Foundations of Early Childhood Education.....	3 cr.
EDFN-303	Early Childhood Development.....	3 cr.
ECED-313	Language Development and Acquisition.....	3 cr.
ECED-316	Child, Family, and Community.....	3 cr.
(ECED-316 and ECED-328a must be taken concurrently)		
ECED-328a	Clinical Experiences/Infant Toddler.....	1 cr.
(ECED-316 and ECED-328a must be taken concurrently)		
ECED-338	Developmental Assessment of Young Children.....	3 cr.
ECED-301	Curriculum and Instruction in Early Childhood.....	4 cr.
ECED-302	Methods of Teaching Language Arts, Music and Art in Early Childhood.....	3 cr.
ECED-305	Methods of Teaching Mathematics, Science, and Social Studies in Early Childhood.....	3 cr.
(ECED-305, ECED-306 and ECED-328b must be taken concurrently)		
ECED-306	Methods of Teaching Reading in Early Childhood.....	3 cr.
(ECED-305, ECED-306 and ECED-328b must be taken concurrently)		
ECED-328b	Clinical Experiences/Preschool-Kindergarten and Primary.....	2 cr.
(ECED-305, ECED-306 and ECED-328b must be taken concurrently)		
ECED-329	Student Teaching in Early Childhood.....	9 cr.
Electives: 3 credit hours (Select One)		
ECED-314	Health and the Preschool Child.....	3 cr.

ECED-317 Modern Concepts of Play in the Learning Process.....	3 cr.
ECED-325 Literature For Young Children	3 cr.
ECED-334 Dealing with Children and Their Families Under Stress.....	3 cr.
INMD-116 Microcomputer Literacy for Educators.....	3 cr.

MINOR AREA OF STUDY

From the listing of approved minors below, select a minor to complete. Read the University Catalog description and consult with the respective department regarding minor requirements and advisement procedures.

Anthropology	French	Philosophy
Art (Studio)	Geography & Environmental Studies	Physics
Biology		Political Science
Chemistry		Psychology
Dance	History	Sociology
Economics	Linguistics	Spanish
English	Mathematics	

NOTE: To be entitled for certification a student must earn a grade of "B" or better in Student Teaching.

In addition to the professional education courses outlined above, students must complete specific general education course work as described below.

Fine Arts (6 credit hours)

ART-180 Art for the non-art major	3 cr.
MUS-102 Music Fundamentals I.....	3 cr.

Humanities (9 credit hours)

Choose from Limited List in: English, Foreign Language, Linguistics, Philosophy	9 cr.
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Behavioral and Social Science (12 credit hours)

HIST-214 or 215 United States History	3 cr.
HIST-104 or 107 or 109 (Non-Western/Third World)	3 cr.

PSCI-AMER-216 American National Government.....	3 cr.
Elective (Chosen from Limited List)	3 cr.

Natural Sciences (12 credit hours)

Science Laboratory Course	3 cr.
Science Electives (Chosen from the Limited List)	9 cr.

Interdisciplinary (3 credit hours*)

(*This will be fulfilled by course work from education major)

General Education Requirements not on the Limited List: (21 cr. hrs.)

ENGL-101 and 102 Writing I and Writing II.....	6 cr.
SPCH-COMM-202 Voice and Diction.....	3 cr.
HPER-HLED-301 Health Ed in Elementary School	2 cr.
MATH-103 Mathematics for Elementary Teachers	3 cr.
MATH Elective.....	3 cr.
Physical Education Elective	1 cr.

Elective from Language Arts**, Science, Social Science, Humanities and/or Psychology3 cr.
 (**Language Arts: Coursework in oral and written expression, grammar, spelling, handwriting, literature for children, and other literature as is commonly found in the course of study in the elementary schools, **excluding** professional education coursework. Consult your advisor prior to taking coursework to fulfill this elective requirement.)

NOTE: All students wishing to teach in Chicago must take an additional two credit hours of coursework in Reading. The following course will satisfy this additional requirement:

READ-311 Fundamentals of Reading Instruction.....	3 cr.
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Minor in Preschool Education (18 cr. hrs.)

NOTE: Students who are majors in Early Childhood Education may **not** select the Minor in Preschool Education or the Minor in Hospital Play Education to fulfill the University requirements for an area of study in addition to the major.

The Preschool Minor consists of 15 credit hours of required coursework and 3 credit hours of elective coursework.
 Prerequisite: EDFN-303 Early Childhood Development or PSYC-212 Child Psychology

Core Courses:

EDFN-302 Philosophical & Historical Foundations of Early Childhood Education	3 cr.
ECED-313 Language Development & Acquisition.....	3 cr.
ECED-316 Child, Family & Community	3 cr.

(ECED-316 and ECED-320a must be taken concurrently)

ECED-320a Practicum in Early Childhood Alternative Settings: Preschool	2 cr.
(ECED-316 and ECED-320a must be taken concurrently)	

ECED-301 Curriculum & Instruction in Early Childhood	4 cr.
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Electives: (Select One)

ECED-302 Methods of Teaching Language Arts, Music and Art in Early Childhood	3 cr.
ECED-314 Health and the Preschool Child.....	3 cr.
ECED-317 Modern Concepts of Play in the Learning Process	3 cr.
ECED-325 Literature for Young Children	3 cr.
ECED-338 Developmental Assessment of Young Children	3 cr.

Minor in Hospital Play Education (18 cr. hrs.)

This minor complements the Early Childhood major. However, students from other departments who have sufficient background or take additional specific course work will also be accepted into this program.

Before starting professional preparation, students are expected to have completed one course in child psychology, three courses in child development and have had 100 hours of supervised field experience with normal children. The early childhood education required core and laboratory courses meet the last two requirements. The department will evaluate equivalent experience from other departments.

Prerequisite:

PSYC-212 Child Psychology or	
EDFN-306 Education and Individual Differences	

Required Courses:

C&I-ECED-317 Modern Concepts of Play in the Learning Process	3 cr.
C&I-ECED-334 Dealing with Children and Their Families Under Stress	3 cr.
C&I-ECED-320B Practicum in Early Childhood Alternative Settings: Hospitals.....	3 cr.
C&I-ECED-340 Methods of Working with the Hospitalized Child	3 cr.
C&I-ECED-335B Internship in Early Childhood Alternative Settings: Hospitals.....	6 cr.
Total	18 cr.

Courses applied toward the Early Childhood Education Major may not be applied toward the Minor in Hospital Play Education. Majors in Early Childhood Education should consult with their advisors to select the appropriate elective courses.

COURSE OFFERINGS

C&I-ECED-301 Curriculum and Instruction in Early Childhood Education, 4 cr. Relationship of theory to practice is studied in a variety of early childhood curricula with respect to teaching-learning processes. Special attention is directed to activity/learning centers, individualization, educational play, classroom management, along with planning and preparation of curricular materials (including audio-visual) for multicultural settings for normal and mainstreamed exceptional children. **Prereq.:** EDFN-302 and EDFN-303.

C&I-ECED-302 Methods of Teaching Language Arts—Primary through Upper Grades, 3 cr. Investigates children's acquisition and use of language. The relationship of the language arts (including literature, listening, speaking, written composition, handwriting and spelling) to other curricular areas in multicultural settings is stressed. Related instructional methods and materials for normal, bilingual, learning disabled, and mainstreamed exceptional children are surveyed. Techniques for managing a classroom environment conducive to language development are explored in supervised clinical experiences. Emphasis on primary grades. **Prereq.:** EDFN-305 and C&I-ECED-301.

C&I-ECED-303 Instructional Materials in Early Childhood Education, 3 cr. Uses a problem-solving approach to the development, utilization, and evaluation of instructional methods for use with young children. Emphasis is upon

construction of instructional materials in content areas for utilization in specific classrooms instructional materials in content areas for utilization in specific classrooms and/or learning centers. **Prereq.:** junior standing.

C&I-ECED-304 Methods of Teaching Social Studies—Primary through Upper Grades, 3 cr. A study of instructional methods and materials for teaching social studies to normal, learning disabled, and mainstreamed exceptional children in multicultural classrooms. Explores approaches to promoting children's cognitive and affective concept formation, problem-solving skill development, and appreciation of cultural diversity. Accompanied by supervised, sequential clinical experiences culminating in teaching student-developed instructional units. Classroom management techniques conducive to the implementation of successful individual and group unit projects are investigated. Emphasis on primary grades. **Prereq.:** C&I-ECED-301 and consent of program coordinator.

C&I-ECED-305 Methods of Teaching Science—Primary through Upper Grades, 3 cr. A study of instructional methods and materials for teaching science to normal, learning disabled, and mainstreamed exceptional children in multicultural classrooms. Emphasizes the process approach with an exploration of techniques for developing skills in observing, experimenting, problem-solving, and creative thinking. Accompanied by sequential, supervised clinical experiences culminating in teaching student-developed instructional units. Includes classroom management strategies conducive to the implementation of successful individual and group science investigations. Emphasis on primary grades. **Prereq.:** C&I-ECED-301 and consent of program coordinator.

C&I-ECED-306 Methods of Teaching Reading in Early Childhood, 3 cr. Methods, techniques, and materials for the early stages of the teaching of reading; the nature of the reading process; the place of reading in the total development of the normal child, and the child with special needs. The developmental reading program with emphasis on "reading to learn" refinement of techniques and enlargement of interests with attention to study skills and types of non-verbal reading and comprehension skills. Includes work on identification of and methods of instruction for the exceptional child. **Prereq.:** C&I-ECED-301 and consent of program area coordinator.

C&I-ECED-307 Creative Movement, Music and Games, 3 cr. Lecture-lab course giving consideration to the value, content and anticipated outcome underlying creative rhythmic movement, music and game activities for young children; initiating experiences in creative expression that reflects studies in other areas; developing techniques that cultivate the natural bodily expression of children; making and using a variety of percussion and melody instruments and providing accompaniments for various activities. Consideration is also given to the social and developmental needs of children through games and group activities; developing techniques for evaluating progress. **Prereq.:** a basic course in music fundamentals.

C&I-ECED-308 Creative Activities, 3 cr. A multi-sensory approach utilizing laboratory experiences and focusing upon music, art, dance, and drama for the young child. Incorporating the creation, construction, and use of the many materials,

instruments, and activities which enrich the program. *Prereq.:* a basic course in art fundamentals.

C&I-ECED-309 Current Trends in Preschool and Kindergarten Education, 3 cr. An in-depth study and evaluation of modern school practices in preschool and kindergarten education in conjunction with the study of current research in child development. *Prereq.:* a course in child development.

C&I-ECED-310 Methods of Teaching Mathematics—Primary through Upper Grades, 3 cr. A study of instructional methods and materials for teaching mathematics to normal, learning disabled, and mainstreamed exceptional children in multicultural classrooms. Topics investigated include readiness, prenumber and number concepts and skills, problem-solving, and diagnostic and assessment procedures. Accompanied by sequential, supervised clinical experiences culminating in teaching student-developed instructional units. Stresses classroom management techniques conducive to the implementation of successful individual and group participation in mathematics learning centers and labs. *Prereq.:* C&I-ECED-301 and consent of program coordinator.

C&I-ECED-312 Teaching Strategies with Multi-Cultural Groups, 3 cr. Explores the variety of cultural values of American ethnic groups that children bring to the city classrooms and the teacher's role in enhancing each child's learning experiences. Observations and visitations to be arranged. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-313 Language Development and Acquisition, 3 cr. Focuses upon language growth and development of young children with particular emphasis upon programs and techniques designed to facilitate acquisition of language skills. Major language acquisition theories are studied. The relationship of language development to cognitive and social-emotional growth is explored. Basic language development inventories are reviewed. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-314 Health and the Preschool Child, 3 cr. A study of the effects and specific contributions that nutrition and health care, received in early childhood, have upon the growth factors and learning experiences of children. Early nutrition education as reflected in school programs, community resources, and other safety, first-aid, and immunization programs will be examined as well as state licensing. *Prereq.:* junior standing.

C&I-ECED-315 Practicum in Preschool Education, 6 cr. Provides students with a supervised clinical experience with young children in preschool settings. Students will assume instructional responsibilities for all aspects of the preschool curriculum. A minimum of twelve hours participation per week for sixteen weeks is required. *Prereq.:* Concurrent registration in C&I-ECED-339 and consent of program coordinator.

C&I-ECED-316 Child, Family, and Community, 3 cr. The study of family and community relations: working with parents; locating and using resources/programs in the community; ways of coordinating community, family, and school cooperation in a culturally diverse environment. Includes a focus upon the needs of young children, 0-3 years of age. Taken concurrently with ECED 328a, Clinical Experiences/Infant Toddler. *Prereq.:* Junior standing.

C&I-ECED-317 Modern Concepts of Play in the Learning Process, 3 cr. An exploration of the importance of play in the learning process and the types of play activities which will most effectively promote the physical growth and development of young children. Provision is made for the study of play, space, materials and facilities found in a variety of school and non-school settings and for the study of the relationship between play and the emotional and social needs of the child. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-319 Practicum in Early Childhood Alternative Settings, 3 cr. Practical experiences with young children in a variety of community settings. Students will be assigned to observe children in settings such as social agencies, museums and libraries. Emphasis is upon gradual introduction into assuming responsibilities culminating in the development and ability to work with children in these settings. Guidance and supervision by university supervisors and community workers. *Prereq.:* completion of 12 credit hours in early childhood education.

C&I-ECED-320A Practicum in Early Childhood Alternative Settings: Preschool, 3 cr. Provides students with supervised experience working with young children in preschool settings. Students will be required to plan and teach pre-readiness activities under the direction of a qualified preschool teacher. A minimum of nine hours per week participation is required. *Prereq.:* completion of the preschool education minor; concurrent registration in C&I-ECED-339.

C&I-ECED-320B Practicum in Early Childhood Alternative Settings: Hospitals, 3 cr. Provides field experience for hospital play education students who, under direct supervision of play specialists, will provide services to children in clinics, hospital inpatient units, playrooms, and ambulatory facilities. A minimum of nine hours per week participation is required. *Prereq.:* C&I-ECED-307, C&I-ECED-308, C&I-ECED-317, three courses in child development, and 100 hours of supervised field experience with normal children. Concurrent registration in C&I-ECED-340.

C&I-ECED-321 Outdoor Education for Young Children, 3 cr. Exploring methods of providing experiences in the outdoors as an alternative approach to learning in early childhood. Emphasis will be upon developing language arts and science skills with the integration of social studies, mathematics, art, and music activities. Neighborhood parks, forest preserves, nature centers, and beaches offer sites for field experiences. Urban school playgrounds as well as business and residential areas are investigated as potential sites. *Prereq.:* junior standing.

C&I-ECED-322 Critical Analysis of Preschool Education, 3 cr. A critical and comparative evaluation of preschool educational methods, types of day care centers, their philosophies and responses to preschool children. Via field observation, film, readings and discussions, emphasis will focus upon the learning experiences the preschool may provide the child 3 to 5 years of age. Group visitations required. *Prereq.:* C&I-ECED-311.

C&I-ECED-323 Orientation to Early Childhood Education, 3 cr. Designed to introduce the students to the developmental characteristics of young children (from preschool

through third grade); the philosophical and psychological bases of early childhood education; past and present educational programs for young children in public, private, and parochial schools; the professional responsibilities of teachers of young children. *Prereq.:* junior standing.

C&I-ECED-324 Problems of the Beginning Teacher, 3 cr. Self-analysis and self-evaluation of practicum experiences with a view toward improving student teacher competency. At the conclusion of student teaching experience, time will be devoted to evaluation of the total experience as well as consideration of professional problems of beginning teachers. *Prereq.:* concurrent registration in student teaching or teaching experience.

C&I-ECED-325 Literature for Young Children, 3 cr. Preparation for effective teaching of literature in preschool, kindergarten and primary grades; wide readings of books for young children; guided practice in story selection and storytelling; classroom methods in the management of creative expression based on literary experience; guidance of individual reading; investigation of children's interests; classroom methods in the presentation of poems including choral reading; acquaintance with outstanding authors and illustrators of children's books; appropriate book lists and indexes. *Prereq.:* junior standing.

C&I-ECED-326 Principles of Preschool Education, 3 cr. A study of the basic learning principles, curriculum, and direct methods, derived from historical perspectives, which preschools provide for the young child of 3 to 5 years. Through guided activities, emphasis will be placed upon the importance of child development theories and their influence upon children's learning experiences. A minimum of three hours per week of clinical experience with children in school settings. *Prereq.:* C&I-ECED-311.

C&I-ECED-327 Techniques of Group Dynamics and Pupil Supervision for the Young Child, 3 cr. Relates important findings about group dynamics and pupil supervision techniques to actual classroom situations involving the young child aged 3-9. Emphasis will be placed upon developing effective and constructive practices to present adjustment problems and solve organizational difficulties which may occur. *Prereq.:* EDFN-303 or PSYC-212 or equivalent.

C&I-ECED-328a Clinical Experiences in Early Childhood Education/Infants Toddlers, 1 cr. Extended field and laboratory experiences in a variety of teaching/learning activities with infants/toddlers. The supervised guided experiences are integrated with studies in ECED-316—Child, Family, and Community, and fulfill a minimum of 32 clock hours of the 100 clock hours required by the State of Illinois for certification in Early Childhood Education. Supervision by and individual conferences with university instructor. Concurrent course: ECED-316. *Prereq.:* Consent of program coordinator.

C&I-ECED-328b Clinical Experiences in Early Childhood Education/Preschool-Kindergarten and Primary Grades, 2 cr. Teaching/learning activities with preschool-kindergarten and primary children in private and public school classrooms. Eight weeks will be spent in a preschool-kindergarten setting and eight weeks will be spent in a primary classroom. The supervised guided experiences are

integrated with studies in methods classes. Supervision by university faculty, student conferences, and biweekly seminars. Fulfills a minimum of 68 clock hours of the 100 clock hours required by the State of Illinois for certification in Early Childhood Education. Concurrent courses: ECED-305, ECED-306. *Prereq.:* ECED-328a and consent of program coordinator.

C&I-ECED-329 Student Teaching in Early Childhood, 9 cr. Sixteen weeks of full-day student teaching under the supervision of a certified cooperating teacher. Students are required to take full responsibility for assigned classes of students. Weekly two-hour seminars. Regular visits and conferences with university supervisor. *Prereq.:* Completion of required professional educational courses and consent of program coordinator and coordinator of student teaching.

C&I-ECED-330 Laboratory Experiences in Early Childhood Education: Preschool, 3 cr. Extended field and laboratory experiences in a variety of teaching/learning activities with young children in both private and public preschool centers. The guided experiences are integrated with courses in early childhood education which are taken concurrently with this field experience. Supervision by university instructor, conferences with students. *Prereq.:* early childhood courses must be taken concurrently.

C&I-ECED-331 Laboratory Experiences in Early Childhood Education: Kindergarten, 3 cr. Extended field and laboratory experiences in a variety of teaching/learning activities with young children in private and public kindergarten classrooms. The guided experiences are integrated with courses in early childhood education which are taken concurrently with this field experience. Supervision by university instructor; conferences with students. *Prereq.:* early childhood education courses must be taken concurrently.

C&I-ECED-332 Laboratory Experiences in Early Childhood Education: Primary Grades, 3 cr. Extended field and laboratory experiences in a variety of teaching/learning activities with young children in both private and public primary grade classrooms. The guided experiences are integrated with courses in early childhood education which are taken concurrently with this field experience. Supervision by university instructor; conferences with student. *Prereq.:* early childhood education courses must be taken concurrently.

C&I-ECED-333 Alternatives for Dealing with Children, 3 cr. Definition of problems and planning of projects growing out of teaching and other educational situations. This includes presentation skills required to assess the needs, motivations, and capacities of young children. Methods of observing and documenting behavior (individual and group) and interpretation of the underlying dynamics are studied. Children's art, language, and dramatic play are examined as material for understanding the meanings of a behavior. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-334 Dealing with Children and Their Families Under Stress, 3 cr. Focuses upon the problems of the child and his family which interfere with normal development. Designed to help students assist young children, their siblings and parents cope with stressful situations in both schools and alternative settings, including hospitals, clinics, and preschools. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-335A Internship in Early Childhood Alternative Settings: Preschool, 9 cr. Students will be assigned to work with children under the direct supervision of teachers in preschools, either nursery schools or day care centers, on an intensive basis. They will be expected to assume total responsibility for working with children, functioning as interns. Supervision will be by university supervisors and teachers. *Prereq.:* satisfactory completion of ECED-320A and on-the-job performance acceptable to the cooperating agency as well as the department of early childhood education.

C&I-ECED-335B Internship in Early Childhood Alternative Settings: Hospital, 12 cr. Students will be assigned to work under the direct supervision of play therapists with children in hospitals and clinics. During this full-time field experience, students will be expected to assume total responsibility for intensive work with children in this setting, functioning as hospital play specialists. Guidance and supervision will be by university supervisors and professionals in hospitals. *Prereq.:* satisfactory completion of C&I-ECED-320B and on-the-job performance acceptable to the cooperating agency as well as the consent of the department of early childhood education.

C&I-ECED-336 Non-Sexist Strategies for Parents and Teachers of Young Children, 3 cr. Principles of effective parenting and child growth and development will be examined with emphasis upon the young child (birth-eight years). Sex-role development will be studied. The influence of the family upon the development of sex-role stereotypes will be explored as well as the impact of our society in such areas as children's literature, toys, games and play experiences, television and other media, and the school curriculum. *Prereq.:* junior standing.

C&I-ECED-337 The Creative and Cognitive Value of Puppetry With Young Children, 3 cr. This course focuses upon the creative use of puppetry with young children and its application to classroom learning, problem-solving, language development, and self-concept. It is designed with a practical hands-on approach geared to the needs of the teacher or caregiver of young children from preschool through age eight. Implications for use may be within a planned preschool program or of interest to teacher aides, parents, librarians, or teachers in special programs. *Prereq.:* PSYC-212, or EDFN-303 or equivalent, or at least two years experience with young children.

C&I-ECED-338 Developmental Assessment of Preschool Children, 3 cr. Focuses on the diagnosis and assessment of developing needs of the young child from birth through age five; special emphasis on measuring physical, emotional, mental and social growth to determine intervention needs. Specific programs to facilitate normal development will be planned. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-339 Methods of Developing Cognitive Readiness in the Young Child, 3 cr. A methods course designed to present specific techniques to stimulate skill development and cognitive readiness in quantitative, auditory, visual, and language components of learning. Includes activities designed to promote concept formation and learning from infancy until the child is ready to experience formal instruction of the primary school. *Prereq.:* PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-340 Methods of Working with the Hospitalized Child, 3 cr. Designed to familiarize students with techniques for working with hospitalized children, using play for diversion, education, assessment, development and therapeutic purposes. Through lecture, discussion, demonstrations and projects deals with developing a pediatric play program to meet specific needs of hospitalized children and their families. Problems arising in implementation of program, including resistance, burnout, and staffing are studied.

Prereq.: consent of instructor; C&I-ECED-317 and C&I-ECED-334; concurrent registration in C&I-ECED-320B.

C&I-ECED-341 Care and Education of the Infant and Toddler, 3 cr. Focuses upon the needs of young children 0-3 years of age and the importance of quality, comprehensive early child care which will maximize the learning potential and behavioral development of the young child. Varied studies representing leading theorists in the field of infant-toddler education will be presented and discussed. Included in this format is the study of the prenatal period. Students will develop a variety of stimulation materials and visit infant-toddler programs. *Prereq.:* junior standing.

C&I-ECED-342 Developing and Directing Early Childhood Programs, 3 cr. This course will define the basic issues of early childhood program development for prospective and inservice program directors. Various administrative organizational patterns and types of regulations will be identified. The relationship between educational philosophy and policy development will be analyzed. There will be an exploration of the director's major roles: developing curriculum, financing, budgeting, staffing, supervising, housing, equipping, involving parents, providing for nutrition and health services and evaluating. *Prereq.:* C&I-ECED-326 or consent of instructor.

C&I-ECED-343 Independent Study in Early Childhood Education, 3 cr. Intensive individual study in one or more of the various fields of emphasis in early childhood education under faculty guidance. *Prereq.:* consent of instructor.

C&I-ECED-352 Methods of Teaching Language Arts, Music and Art in Early Childhood, 3 cr. Methods and materials for teaching language arts (literature, listening, speaking, written composition, drama), music, and art to normal, learning disabled, and mainstreamed exceptional children in multicultural classes. Explores theories, concepts and approaches in the three areas as well as their relationships to one another. *Prereq.:* C&I-ECED-301, ART-180, MUS-102, SPCH-COMM-202, or equivalent.

C&I-ECED-355 Methods of Teaching Mathematics, Science, and Social Studies in Early Childhood, 3 cr. A study of instructional methods and materials for teaching mathematics, science, and social studies to normal, learning disabled, and mainstreamed exceptional children in multicultural classrooms. Explores major concepts and approaches in the three areas as well as their relationships to one another and other content areas. Classroom management techniques conducive to the implementation of successful individual and group lessons are investigated. Emphasis is on preschool and primary grades. ECED-328b taken concurrently. *Prereq.:* C&I-ECED-301 and consent of program area coordinator.

C&I-ECED-401 Improvement of Instruction in Early Childhood Education, 3 cr. A practical experience for teachers and administrators to study topics pertinent to early childhood education. Such topics might include strategies for working with student teachers, planning for individual progressions, resource unit development, self instructional materials for primary learning centers, or any other problems applicable to a specific school situation. *Prereq.:* graduate standing, nine credit hours in professional courses, including curriculum and either child psychology or educational psychology.

C&I-ECED-402 Application of Learning Theories to Early Childhood Education, 3 cr. A review of various theories of children's mental development with implications for classroom teaching techniques. Topics to be included in this course are questioning techniques and the design of materials that provided an environment favorable to active thinking. *Prereq.:* graduate standing, C&I-ECED-318 and EDFN-307, or EDFN-401, or equivalent.

C&I-ECED-403 Early Childhood Assessment, 3 cr. Focuses upon the use and development of evaluation instruments for collecting information about young children. Instruments used will focus on individuality of the child and his unique growth trends and patterns of developmental needs. The materials studied will help the teacher to identify where the child is developmentally and to use instruments and techniques to evolve ways to help the individual child grow. *Prereq.:* graduate standing, SPED-303, PSYC-212, or equivalent.

C&I-ECED-404 Organizing and Directing of Early Childhood Centers, 3 cr. Explores and evaluates practices in organizing and administering early childhood centers. Areas of study include housing, equipping, staffing, and financing. Policies related to health and safety, admission, grouping, recording, reporting, teacher development and school and community relations are developed. Opportunity is provided for the study of problems and issues in specific types of schools such as the cooperative nursery school, day care centers, the private nursery school, Head Start programs, Follow Through programs, Inclusive Child Development Centers—pre-kindergarten through third grade in urban and suburban communities. *Prereq.:* graduate standing, PSYC-212 or EDFN-303 or equivalent.

C&I-ECED-405 Perspectives in Early Childhood Education, 3 cr. Students will study in depth a limited number of early childhood educational ideas, past and present, and look at ways they are being implemented in classrooms. Emphasis will be on understanding the commonality among early childhood education theorists. *Prereq.:* graduate standing and nine credit hours in early childhood education.

C&I-ECED-406 Perspectives on Parenting, 3 cr. Designed to train the early childhood teacher to teach parenting skills to parents. Reviews patterns of growth from birth focused on flexible parent-child communication designed to promote optimal development and stimulate growth. Provides a critical analysis and overview of several of the materials available for parent education and develop guidelines for evaluating them. *Prereq.:* graduate standing, PSYC-212, or EDFN-303 or equivalent.

C&I-ECED-407 Family, Child, and Teacher Interac-

tion in Early Childhood Education, 3 cr. A course designed for teachers of young children who are working to integrate parents into the educational program. Family styles and parenthood are examined followed by methodologies for involvement in children's education. Practical realities of teaching including home visits, communication skills, and alternative avenues for communication will be discussed. An exploration of the culture of the early childhood setting and implications for teachers and families will be included. *Prereq.:* graduate standing and 12 credit hours in education.

C&I-ECED-408 Language Acquisition and Intervention Strategies for Teachers of Young Children, 3 cr. Focuses upon the acquisition of language as the young child develops syntactic, semantic, and pragmatic understanding. Differing viewpoints of language learning and cognitive interaction are presented. Techniques for both language assessment and intervention by the teacher of the young child are discussed. Reviews recent research and its applicability to assist the preschool teacher in facilitating language learning and evaluating existing language programs for using language as a tool of communication. *Prereq.:* graduate standing; PSYC-212; and either C&I-ECED-313, C&I-ECED-318, or equivalent.

C&I-ECED-409 Child Advocacy, 3 cr. To help practitioners understand issues, areas of advocacy, and intervention techniques directed toward services and institutions that affect the lives of children, birth through nine years. *Prereq.:* graduate standing and 12 credit hours in education.

C&I-ECED-410 Curriculum Development in Early Childhood Education, 3 cr. Study of the implications of theories of child development for early childhood curriculum development. Investigation of strategies for planning, teaching, and evaluating learning experiences which promote cognitive and affective development. Techniques for working with small and large groups are explored through observation and analysis of classroom interaction. Issues related to multicultural education, the utilization of community resources, and parent-teacher relationships are examined. Major early childhood programs are evaluated. *Prereq.:* graduate standing and 12 credit hours in education.

C&I-ECED-411 Practicum in Early Childhood, 3 cr. To provide an opportunity for supervised observation and teaching with normal young children. Practical application of methods and techniques with an integrating seminar will help the practitioner develop teaching strategies. Emphasis will be on the development of skills and a self-analysis of techniques. *Prereq.:* acceptance to master's degree candidacy and nine credit hours in core courses (SPED-304; C&I-ECED-313 or C&I-ECED-408 or SPED-484; C&I-ECED-403; C&I-ECED-410).

C&I-ECED-412 Research Seminar in Early Childhood Education, 3 cr. Criteria for selecting research problems and evaluating hypotheses are explored. Various types of experimental designs and descriptive approaches to research design are investigated. Techniques for writing research proposals and reports are studied. There is an examination of recent developments in data processing related to educational research. Other topics include sampling procedures, reliability, validity, interviews, questionnaires, and observational techniques. *Prereq.:* 24 hours towards master's degree and consent of advisor.

EDUCATIONAL FOUNDATIONS

Kenneth N. Addison, Ph.D., Associate Professor
 Jeanne Baxter, Ph.D., Associate Professor, Chairperson
 Vernon Braun, Ed.D., Assistant Professor
 Richard H. Brewer, Ph.D., Professor
 Steven Brown, Ph.D., Associate Professor
 Jean B. Carlson, Ph.D., Professor
 Barbara Cook, J.D., Assistant Professor
 Diane Ehrlich, Ph.D., Associate Professor
 Janet Fredericks, Ph.D., Associate Professor
 Phyllis Goldblatt, Ph.D., Professor
 Nancy Green, Ph.D., Professor
 Elaine Koffman, Ph.D., Assistant Professor
 Sharon McNeely, Ph.D., Assistant Professor
 Jerry B. Olson, Ph.D., Professor
 Mitchell Vogel, M.A., Associate Professor
 Marvin Willerman, Ed.D., Professor

The Department of Educational Foundations offers the Educational Foundations sequence of courses required for teacher certification. The Department also offers an undergraduate major which leads to a Bachelor of Arts degree in Human Resource Development and four undergraduate minors: Human Resource Development, Educational Studies, Educational Psychology, and Multi-Cultural Education. Graduate programs include a Master of Arts in Educational Administration and a Master of Arts in Human Resource Development.

UNDERGRADUATE PROGRAMS

Educational Foundations Sequence

The Educational Foundations sequence introduces students to content in the disciplines of philosophy, psychology, history, anthropology, economics, political science, and sociology which is basic to understanding the educational process. Courses required in the sequence follow, with graduate level course offerings in parentheses.

EDFN-305 Philosophical and Historical Foundations of Public Education (or EDFN-405)	3 cr.
EDFN-306 Educational and Individual Differences (or EDFN-406)	3 cr.
EDFN-307 Psychology of Instruction and Learning (or EDFN-407)	3 cr.

Major in Human Resource Development for the Bachelor of Arts Degree

For program requirements and course descriptions, please refer to the Human Resource Development section of this catalog.

Undergraduate Minors

Minor in Human Resource Development (18 cr. hrs.)

For program requirements and course descriptions, please refer to the Human Resource Development section of this catalog.

Minor in Educational Studies (18-20 cr. hrs.)

The Minor in Educational Studies is designed to allow students to investigate the educational process in a more specialized fashion.

Required Courses:

EDFN-203 Laboratory in the Foundations of Education	2 cr.
EDFN-312 Seminar in Current Educational Literature	3 cr.
Area Courses:	9 cr.

Courses are required in one or more of the following areas as related to education: anthropology, history, philosophy, program evaluation, psychology, quantitative analysis and/or sociology. Courses will be selected by the student in consultation with an advisor in the Educational Foundations Department.

Education Electives:	4-6 cr.
Electives will be selected by the student in consultation with an advisor in the Educational Foundations Department.	
Total	18-20 cr.

Minor in Educational Psychology (18-20 cr. hrs.)

The minor in educational psychology is designed to develop understanding of the psychological processes which are essential to successful curriculum development.

Required Courses:

EDFN-203 Laboratory in the Foundations of Education	2 cr.
EDFN-306 Education and Individual Differences	3 cr.
EDFN-307 Psychology of Instruction and Learning	3 cr.
EDFN-312 Seminar in Current Educational Literature	3 cr.
Select one of the following two courses:	3 cr.
EDFN-319 Psychological Issues in Educational Settings	3 cr.
EDFN-321 Group Dynamics in Educational Settings	3 cr.
Select one of the following two courses:	3 cr.
HRD-315 Computer Utilization in Human Resource Development	3 cr.
EDFN-322 Introductory Statistical Analysis in Education	3 cr.
Electives	1-3 cr.

Electives will be selected by the student in consultation with an advisor in the Department of Educational Foundations.

Total 18-20 cr.

Minor in Multi-Cultural Education (18 cr. hrs.)

The Minor in Multi-Cultural Education is designed to explore cultural influences on learning and schooling.

Required Courses:

SSCI-I/IS-102 Introduction to Intercultural Studies	3 cr.
EDFN-204 Laboratory in the Foundations of Education	3 cr.
EDFN-312 Seminar in Current Educational Literature	3 cr.
EDFN-314N Multi-Cultural Education	3 cr.
Electives	6 cr.
Electives will be selected in consultation with the advisor.	
Total	18 cr.

GRADUATE PROGRAMS

Master of Arts in Human Resource Development

Please refer to the Human Resource Development section of this catalog for admission and degree requirements, and course offerings.

Master of Arts in Educational Administration

Northeastern Illinois University offers the Master of Arts in Educational Administration degree in cooperation with Chicago State University and Governor's State University. Students may select one of three concentrations: 1) Administration; 2) Chief School Business Official; and 3) Community College Administration. Program objectives for the three concentrations have been designed to develop exemplary administrative leaders and to foster their continuing growth and effectiveness. Specifically, students in the Administration concentration are to develop competencies related to effective leadership and educational management practices, and to demonstrate knowledge of the staff development skills needed in the practice of educational administration. The Chief School Business Official concentration is to develop knowledge and skills in the areas of school finance, collective bargaining, personnel management and human relations. Emphasis is also placed on business management practices and the application of theoretical knowledge to effective school business practices. The Community College Administration concentration provides knowledge and skills related to the history and development of community colleges and to effective administrative practices at that level. And, it stresses an understanding of administrative and supervisory skills for the development of instructional systems.

Requirements for Admission to the Program:

In addition to the requirements of the Graduate Catalog for admission, students who wish to enroll in the Master's Degree Program in Educational Administration must meet the following eligibility requirements:

1. A bachelor's or master's degree from an accredited institution of higher education. For those with a bachelor's de-

gree only, a grade point average of 2.75 (on a 4.0 scale) for all undergraduate work is required. Students with a lower grade point average may be accepted conditionally.

2. Admission to the Administration concentration requires two years of verified full-time teaching experience in schools recognized by the Illinois State Board of Education (two years of verified full-time experience for school psychologists and school social workers in their respective fields may be substituted for teaching experience). Admission to the concentration for Chief School Business Official requires two years of school business management experience. Admission to the concentration in Community College Administration does not require teaching experience.

Program Requirements:

1. Selection of a concentration in Administration, Chief School Business Official, or Community College Administration.
2. Completion of 36 credit hours. (A student must take a minimum of two courses or six credit hours at one or both of the other cooperating universities. Acceptance by Northeastern Illinois University admits the student to course offerings at the other institutions.)

Required Courses:

Administration Concentration

EDFN-401 Curriculum Development and Learning Theories	3 cr.
EDFN-413 Human Relations and Leadership	3 cr.
EDFN-421 Foundations of School Administration and Organization	3 cr.
EDFN-422 Elementary and Secondary School Administration and Supervision	3 cr.
EDFN-424 School Supervision	3 cr.
EDFN-429 Research in Educational Administration	3 cr.
EDFN-431 Community Relations	3 cr.
EDFN-433 School Law	3 cr.
EDFN-434 Practicum in Instructional Leadership and School Management I	3 cr.
EDFN-435 Practicum in Instructional Leadership and School Management II	3 cr.
Approved Electives	6 cr.
Total	36 cr.

Chief School Business Official Concentration

EDFN-413 Human Relations and Leadership	3 cr.
EDFN-421 Foundations of School Administration and Organization	3 cr.
EDFN-429 Research in Educational Administration	3 cr.
EDFN-431 Community Relations	3 cr.
EDFN-432 School Finance	3 cr.
EDFN-433 School Law	3 cr.
EDFN-436 Administration of School Personnel	3 cr.

EDFN-438	Collective Negotiations	3 cr.
EDFN-445	Practicum in School Business Management	3 cr.
EDFN-470	Administrative Use of the Microcomputer	3 cr.
	Approved Electives	6 cr.
	Total	36 cr.

Community College Administration Concentration

EDFN-413	Human Relations and Leadership	3 cr.
EDFN-421	Foundations of School Administration and Organization	3 cr.
EDFN-429	Research in Educational Administration	3 cr.
EDFN-431	Community Relations	3 cr.
EDFN-433	School Law	3 cr.
EDFN-434	Practicum in Instructional Leadership and School Management I	3 cr.
EDFN-435	Practicum in Instructional Leadership and School Management II	3 cr.
EDFN-480	The Community College	3 cr.
EDFN-481	Community College Administration	3 cr.
EDFN-490	Adult Learner	3 cr.
	Approved Electives	6 cr.
	Total	36 cr.

Certification Only Program

For those candidates who already possess a master's degree and are interested in certification only, programs are provided for entitlement to the following state certificates: General Administrative and Chief School Business Official.

Requirements for Admission to the Certification Only Program:

1. A master's degree from an accredited institution of higher learning.
2. Admission to the Graduate College.
3. Two years of verified full-time teaching experience in schools recognized by the Illinois State Board of Education for admission to the program in Administration (two years of verified full-time experience for school psychologists and social workers in their respective fields may be substituted for teaching experience) or two years of verified school business management experience for the Chief School Business Official program.
4. Written recommendations from two school officials.
5. The students must provide evidence of having passed both the State of Illinois and the United States Constitution examinations.

Program Requirements:

General Administration Program (30 cr. hrs.)

EDFN-401	Curriculum Development and Learning Theories	3 cr.
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EDFN-413	Human Relations and Leadership	3 cr.
EDFN-421	Foundations of School Administration and Organization	3 cr.
EDFN-422	Elementary and Secondary School Administration and Supervision	3 cr.
EDFN-424	School Supervision	3 cr.
EDFN-429	Research in Educational Administration	3 cr.
EDFN-431	Community Relations	3 cr.
EDFN-433	School Law	3 cr.
EDFN-434	Practicum in Instructional Leadership and School Management I	3 cr.
EDFN-435	Practicum in Instructional Leadership and School Management II	3 cr.
	Total	30 cr.

Chief School Business Official Program (30 cr. hrs.)

EDFN-413	Human Relations and Leadership	3 cr.
EDFN-421	Foundations of School Administration and Organization	3 cr.
EDFN-429	Research in Education Administration	3 cr.
EDFN-431	Community Relations	3 cr.
EDFN-432	School Finance	3 cr.
EDFN-433	School Law	3 cr.
EDFN-436	Administration of School Personnel	3 cr.
EDFN-438	Collective Negotiations	3 cr.
EDFN-445	Practicum in School Business Management	3 cr.
EDFN-470	Administrative Use of the Microcomputer	3 cr.
	Total	30 cr.

COURSE OFFERINGS

EDFN-116 Microcomputer Literacy for Educators, 3 cr. An introduction to the role, use and operation of the microcomputer in instructional settings. Topics include: the advantages and limitations of the microcomputer in the teaching/learning process, the operation of the microcomputer, and software available for use in educational settings.

EDFN-202 Laboratory in the Foundations of Education, 1 cr. Students will be guided toward appropriate experiences in a concrete setting that will increase their understanding and utilization of concepts developed in the foundations courses. Chicago metropolitan area schools and other settings will be used as the laboratory. *Prereq.: sophomore standing and consent of instructor.*

EDFN-203 Laboratory in the Foundations of Education, 2 cr. (See EDFN-202 for description)

EDFN-204 Laboratory in the Foundations of Education, 3 cr. (See EDFN-202 for description)

EDFN-205 Education and Society: A Global Perspective, 3 cr. The school viewed as a key social institution exercising influence and, in turn, being influenced by the total culture. Both formal and informal organizations within the school and classroom are studied. Interrelations of school

with other basic institutions are examined. Current educational problems resulting from social conditions are studied. Comparisons with schools in other societies sharpen awareness of cultural and social influences on schools within one's own country and offer examples of alternative ways schools and societies interact. *Prereq.: sophomore standing or consent of instructor.*

EDFN-212 American Public Education-History of Education, 2 cr. Education in the United States from an historical perspective with assessment of factors and ideas influencing expansion of education in a context of economic development and social change. (EDFN-212 and EDFN-213 are the equivalent of EDFN-305.) *Prereq.: sophomore standing or consent of instructor.*

EDFN-213 Philosophy of Education, 2 cr. An exploration of the views of selected philosophers concerning education, an examination of the relationships between philosophy and education, and the effects of philosophical positions on classroom practices. (EDFN-212 and EDFN-213 are the equivalent of EDFN-305.) *Prereq.: sophomore standing or consent of instructor.*

EDFN-301 History and Philosophy of Religious Education, 3 cr. The role of religious education in America as well as an overview of religious beliefs and practices behind the different kinds of religious education in America. Attention is given to the development of religiously oriented schools along with recent trends in parochial education. *Prereq.: junior standing or consent of instructor.*

EDFN-302 Philosophical and Historical Foundations of Early Childhood Education, 3 cr. Survey philosophical, historical and psychological bases of early childhood education; a comparative evaluation of past and present educational programs for children from birth to age eight, in public and private school settings; readiness issues and intervention trends in early childhood education; professional responsibilities of early childhood educators.

EDFN-303 Early Childhood Development, 3 cr. Studies the growth and development of young children from birth to age eight, including physical, cognitive, and social-emotional development. Presents major theories, principles, concepts, and research in child development. The role of play in development is addressed. Students complete observations of children at various developmental levels.

EDFN-305 Philosophical and Historical Foundations of Public Education, 3 cr. The exploration of differing views of the aims of public education in America. The study of the historic settings in which the system developed. Identification of major social and cultural problems in relation to their historic antecedents. The study of various philosophic schools of thought and their impact on educational theory and practice, past and present. *Prereq.: junior standing or consent of instructor.*

EDFN-306 Education and Individual Differences, 3 cr. Consideration of individual differences and principles of human development as factors in creating effective learning environments. Emphasis on understanding and assessment: (1) understanding children and adolescents as individuals with differing abilities, aptitudes, interests, emotional responses,

and accomplishments as the result of genetic, maturational, and environmental factors. Special attention given to children and adolescents covered by Public Law 94-142; (2) techniques for assessment of these differences in order to aid student development. Focused study by each student of children or adolescents at a particular age level. Intelligence, self-concept, class and ethnic differences and learning styles considered. Ten hours of classroom observation required.

Prereq.: junior standing or consent of instructor.

EDFN-307 Psychology of Instruction and Learning, 3 cr. Study and application to the teaching situation of theories and principles of learning (affective, behavioral, and cognitive), motivation, and classroom management including problems of mainstreaming. Also attention to establishing objectives, evaluation of learning and introduction to statistical analysis of scores. Case study by each student of classroom observed in terms of application of learning and instruction. Ten hours of classroom observation required. *Prereq.: EDFN-306.*

EDFN-312 Seminar in Current Education Literature, 3 cr. An examination of current educational literature; included would be recent research findings, important views of educational critics, newly developed theories of learning and education, and innovative practices in educational institutions. *Prereq.: junior standing or consent of instructor.*

EDFN-313 Problems, Issues, and Practices in Education, 3 cr. An in-depth examination of salient issues confronting contemporary American education. Topics selected are varied in accordance with student interest. *Prereq.: junior standing or consent of instructor.*

EDFN-314 Social Issues in Educational Settings, 3 cr. An in-depth examination of particular educational issues from viewpoints of the social science disciplines. Titles include Legal Aspects of Education; the Sociology of the Classroom; Education as Cultural Imperialism; Education and Social Reconstruction; Desegregation and Education; Problems of Educational Finance; Separation of Church and State: the effects on the Schools; Education and Social Class; The University in a Changing Society; Professional Organizations and the Schools; The Politics of Education; Sexism in Education; Accountability and the Schools; Multicultural Education; and Education in New China. *Prereq.: junior standing or consent of instructor.*

EDFN-317 Psychological Issues in Educational Settings, 1 cr. In-depth analysis of specified areas concerning the interrelationship between psychology and education. Possible areas are self concept, affect, motivation, effective thinking, interpersonal skills, classroom diagnosis, individualization, teacher effectiveness, roles and problems of teachers, moral development, psychoanalysis, effective parents, learning styles and developing independent learners. Stress on theoretical and practical approaches to help teachers toward self understanding and to provide opportunities for development of strength in one or more of the above areas. Two credit hour courses require field observation or a project; three credit hour courses require both. *Prereq.: junior standing or consent of instructor.*

EDFN-318 Psychological Issues in Educational Settings, 2 cr. (See EDFN-317 for description)

EDFN-319 Psychological Issues in Educational Settings, 3 cr. (See EDFN-317 for description)

EDFN-321 Group Dynamics in Educational Settings, 3 cr. Study of principles of group dynamics as they affect classroom behavior. Development of skills in observing, recording, and analyzing group phenomena, creating effective groups, developing supportive environments, and leadership. Course topics include communication, leadership, norms, subgroups and cliques, ability grouping, small group projects, peer teaching, and group approaches to discipline problems. Reading and discussion of group dynamics literature, observation and analysis of classrooms, group investigations of specific topics and practice in group leadership skills. *Prereq.:* junior standing or consent of instructor.

EDFN-322 Introductory Statistical Analysis in Education, 3 cr. An introduction to statistical analysis with special focus on methods employed in educational research and evaluation. Topics include descriptive statistics, correlational techniques, elementary probability theory, and elementary parametric and non-parametric statistical tests of hypotheses. Emphasis is placed on theoretical foundations, computational skills, and computer utilization. *Prereq.:* junior standing or consent of instructor.

EDFN-325 The Changing Role of Women in American Education, 3 cr. The study of women in education past, present and future. Topics include views of women's mental abilities and "nature"; history of the schooling of women; women as teachers and educational leaders; education for the professions; minority women and education; implications of current research on sex differences and sex roles; and education for the woman of the future. *Prereq.:* junior standing.

EDFN-333 School Law for Teachers, 3 cr. Provides K-12 teachers and prospective teachers with an understanding of the legal impact on schools. Attention is given to current issues and their implications for classroom teachers. Topics include: legal system, sources and levels of law, contracts, tenure, records, collective bargaining, copyright, academic freedom, tort liability, student and teacher rights, discrimination and handicap issues. *Prereq.:* junior standing.

EDFN-401 Curriculum Development and Learning Theories, 3 cr. An analysis of the basic determinants of curriculum; factors influencing curriculum design, current trends and school reforms. Theories and methods of learning and models of teaching in the classroom will be emphasized as they relate to sociological and cultural factors of all children and minority children from different social and ethnic backgrounds. Special education programs are included. Methods are outlined for evaluating the effectiveness of curricula and programs. *Prereq.:* graduate standing; 12 hours of professional education; admitted to M.A. Degree Program in Educational Administration.

EDFN-405 Development of Educational Thought, 3 cr. An examination of the historical development of American education and some of its antecedents. A study of the educational theories of selected philosophies; an examina-

tion of the purposes of education in pluralistic America; an evaluation of educational institutions and practices in terms of present circumstances. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-406 Human Development and Learning, 3 cr. The study of the theories of development of school age children and youth, and of research related to individual differences in characteristics of children within age groups. Current theories and research findings are evaluated in light of their implications for how children learn and for identifying teaching practices that facilitate the acquisition of intellectual and social skills in children at different ages and stages of development. Ten hours of classroom observation required.

Prereq.: graduate standing, 12 hours in professional education or consent of instructor.

EDFN-407 Learning Theories and Educational Practice, 3 cr. Analysis of classroom learning and management in terms of principles and theories of learning and motivation and recent research on teaching effectiveness. Classroom observations required. *Prereq.:* graduate standing, 12 credit hours of professional education, or consent of instructor.

EDFN-410 Education as a Social Institution, 3 cr. Study of the school as a social system and as an institution which influences and is shaped by other institutions of society. Particular attention is given to urban education. Laboratory experiences are expected. *Prereq.:* graduate standing and 12 credit hours in professional education, or consent of instructor.

EDFN-411 Comparative Education, 3 cr. Examination of cross-cultural/ cross-national educational systems comparing and contrasting educational goals of different national groups, identification of common problems which determine the kind and quality of education in a given society or culture, such as economic development, technological development, religious dominance, political climate, and social differences. Interpreting cross-national data such as school leaving age, levels of education, wealth and occupation, and employment rates. Guest lecturers who have had experience with education in other societies. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-412 Selected Concepts in the Philosophy of Education, 3 cr. Analysis of the ideas of important contributors to educational theory. The course will be an in-depth study of a particular theorist or school of philosophy (such as existentialism, Plato, Dewey, Rousseau, or revolutionary philosophers). Inquiry will focus on such themes as the writer's views of the nature of man, means, and ends in education, views of the nature of reality, and knowledge and applications of these concepts to teaching. *Prereq.:* graduate standing and 12 credit hours in professional education, or consent of instructor.

EDFN-413 Human Relations and Leadership, 3 cr. Study of basic concepts and principles of interpersonal relationships, dynamics of groups, and organizational leadership. Emphasis on theory and application. Students will learn to observe and assess interpersonal, group and organizational dynamics in multicultural settings, and learn effective interactions and problem-solving skills. Designed for teachers, trainers, supervisors, administrators, school service personnel, and

community leaders. *Prereq.:* graduate standing; EDFN-421 or consent of instructor; or HRD M.A. Program.

EDFN-416 Cultural Pluralism and the Schools, 3 cr. The study of multicultural groups: differences and commonalities. Special emphasis is on the investigation and evaluation of various concepts and models of cultural and subcultural relationships as manifested in the schools. Study and application of ethnographic methods to sub-cultures related to and within the educational context. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-417 Educational Theorist, 3 cr. An in-depth examination of a particular theorist or theoretical view (such as motivational, client-centered, behaviorist, cognitive, new left, Freud, Piaget, Dewey, or Erikson) with applications to classroom situations. Observations of schools or learning situations, modelled after the particular perspective will probe the implementation of the theorist's ideas at all levels of education. Consideration will be given to the present impact of each theorist and implications for the future. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-418 Seminar in Development and Learning, 3 cr. An in-depth study of theory and research in educational settings on developmental characteristics related to capacity to learn. Titles include Cognitive Development, Social Development, Moral Development and the School, Development in Cross-cultural Perspective, Developmental Crisis and Maturation, The Adult Learner, and Social and Cultural Determinants of Development. Student will focus on an age range of particular interest. Observations will be used to illustrate theory and research. Emphasis will be placed on the ways knowledge about development enhances instruction. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-419 Adolescent Development and Educational Practice, 3 cr. An in-depth study of the theory and research related to adolescent behavior and development. The cognitive-intellectual, personal-social, and physical-motor areas are considered. Classroom observation required. *Prereq.:* graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-421 Foundations of School Administration and Organization, 3 cr. Introduction to the study of educational administration with emphasis upon the nature of the administrative process, administrative theory, and long range planning and personnel management; overview of structure, governance, policy of public education and school reforms at the local, state and federal levels including legal, business, financial and political, social and cultural context of schools in society. Administration of schools and programs including multicultural student populations and exceptional children.

Prereq.: graduate standing, 12 credit hours in professional education, or consent of instructor.

EDFN-422 Elementary and Secondary School Administration and Supervision, 3 cr. An examination of the elementary and secondary school with emphasis upon the role of the principal and his/her relationship with personnel; administrative behavior analyzed in terms of tasks and processes that aide in behavior analyzed in terms of tasks and processes that aid in improving educational programs.

School climate and quality learning environment and academic excellence, staff development, curriculum development, finance, action research; opportunity to solve problems with simulated materials which include an emphasis on program and personnel evaluation. Social and cultural factors and special education programs will be analyzed. *Prereq.:* graduate standing and EDFN-421.

EDFN-424 School Supervision, 3 cr. An analysis of the components of supervisory behavior in education and their influence upon the participants in the process of supervision; human and technical skills in personnel management; organizational factors affecting the performance of the supervisor; problematic areas within educational institutions and their influence upon supervisory behavior. Practical aspects of program and personnel evaluation; improvement of school learning climate and academic achievement will be emphasized as they relate to school reform and both multicultural and exceptional populations. *Prereq.:* graduate standing and EDFN-421 or consent of instructor.

EDFN-428 Seminar in Educational Administration, 3 cr. An in-depth analysis of selected topics and problems in educational administration, study of administrative behavior, theory and contributions of behavioral science to administration as well as the characteristics of schools as organizations with implications for practitioners in education. Focused study in areas such as educational decision-making, practical applications of administrative theory, special problems of the elementary or secondary school, and organizational analysis. *Prereq.:* graduate standing and EDFN-422.

EDFN-429 Research in Educational Administration, 3 cr. Develop skills in research designs including problem statements, hypotheses formulation, population/sample selection, data collection, statistical analysis and interpretation. Historical analysis, descriptive, causal-comparative, correlational and experimental studies will be developed as they relate to effective schools and administrative research. *Prereq.:* graduate standing and EDFN-421.

EDFN-431 Community Relations, 3 cr. An analysis of the role of educational policy in the modern community, community power structure and resources, the social and political context, and the principles of community relations in the context of social change, including group processes, multicultural and multiethnic understanding, the needs of exceptional students, interagency cooperations, funding and evaluation. Students are provided opportunities to develop materials for use in their institutions. *Prereq.:* graduate standing and EDFN-421.

EDFN-432 School Finance, 3 cr. The theoretical background and legal basis of public school finance and the application of those theories to various school finance models. Topics include: budget analysis, state aid mechanism, accounting processes, facility management and maintenance, transportation, contracts, liabilities and food service management. *Prereq.:* graduate standing and EDFN-421.

EDFN-433 School Law, 3 cr. Includes an analysis of selected general legal principles, cases, statute law and law-making agencies affecting educational organizations and

systems. Key content areas include the legal system; role of federal and state governments; the legislative process; school governance, policies and rules and regulations; church and state; civil rights; student and parent rights and responsibilities; collective negotiations, torts and contracts. Content is designed for the practical application of school law. *Prereq.:* graduate standing and EDFN-421.

EDFN-434 Practicum in Instructional Leadership and School Management I, 3 cr. The major purpose of the practicum is to provide the student with a supervised experience in the functions and duties associated with instructional leadership and school management. Each student will participate in administrative activities related to instructional leadership one term and school management the other term. Examples of tasks include staff and curriculum development, pupil personnel services, establishing and maintaining effective learning environments, implementation of policy, business and facilities' management, and community relations. *Prereq.:* graduate standing and completion of 21 hours of core requirements.

EDFN-435 Practicum in Instructional Leadership and School Management II, 3 cr. (See EDFN-434 for description.) *Prereq.:* graduate standing and EDFN-434.

EDFN-436 Administration of School Personnel, 3 cr. Provides a general understanding of the personnel functions in educational settings. Decision-making and problem-solving will be emphasized. Functions of recruitment, assignment, development, coordination, compensation, appraisal negotiations, in-service education, motivation, and dismissal are included. *Prereq.:* graduate standing and EDFN-421.

EDFN-438 Collective Negotiations, 3 cr. The development and establishment of collective bargaining within the educational enterprise: the public and private sectors; in elementary-secondary education and colleges and universities; historical, sociological, and legal perspectives; some consideration and evaluations of various issues (including tactics and process) concepts, and current problems. *Prereq.:* graduate standing and EDFN-421 or consent of instructor.

EDFN-441 Independent Study in Educational Administration, 1 cr. In-depth study of special areas in educational administration. *Prereq.:* graduate standing, consent of instructor, and six credit hours in educational administration.

EDFN-442 Independent Study in Educational Administration, 2 cr. (See EDFN-441 for description.)

EDFN-443 Independent Study in Educational Administration, 3 cr. (See EDFN-441 for description.)

EDFN-445 Practicum in School Business Management, 3 cr. Provides the student with a supervised experience in the functions and duties associated with school business management and operations. Students will participate in activities related to development and implementation of school business procedures, budget development, transportation, and computer operation. *Prereq.:* graduate standing; completion of 24 hours of core requirements.

EDFN-446 Advanced School Business Finance, 3 cr. Designed for those who will serve as school business administrators. Topics include: organization and function of the school business office; decision processes; advanced budgeting, accounting, and cost accounting; planning and pro-

jections; property tax process; debt instruments; financial reporting, audits, and investments; and computer processes.

Prereq.: graduate standing, EDFN-432 and two years administrative experience in an educational setting.

EDFN-450 Advanced Statistical Analysis in Education, 3 cr. The study of the statistical analysis of educational data. An extension of correlation techniques, including partial and multiple correlation. Additional topics include an examination of various complex analyses of variance and nonparametric procedures as used in educational research and evaluation. Emphasis is placed on theoretical foundations, computational skills, and computer utilization. *Prereq.:* graduate standing and EDFN-322.

EDFN-451 Models and Techniques of Evaluating Educational Programs, 3 cr. The study of educational evaluation as an inquiry process. Models for planning evaluation studies and application examples. Additional topics include evaluation criteria, guidelines for writing evaluation reports, computer applications, and evaluation in educational and training programs in other settings. *Prereq.:* graduate standing and nine credit hours in professional education or consent of instructor.

EDFN-452 Methodology of Evaluating Educational Programs, 3 cr. The study of methods for structuring, obtaining, and processing evaluative information. Emphasis is placed on application and problems in evaluation methods of inquiry. Topics include evaluation design, instrumentation, computer utilization, and evaluation in educational and training programs. *Prereq.:* graduate standing and EDFN-451 or consent of instructor.

EDFN-453 Seminar in Educational Foundations, 1 cr. A seminar course designed to provide opportunities for experienced teachers to update their knowledge of educational research and theory with emphasis on relevance to the classroom. Areas considered are the following: Piagetian theory, behaviorist theory, sex differences, motivation, thinking, memory, or a general overview of current psychological research. Additional credits based on projects and/or individual research papers. *Prereq.:* graduate standing or valid teaching certificate.

EDFN-454 Seminar in Educational Foundations, 2 cr. (See EDFN-453 for description.)

EDFN-455 Seminar in Educational Foundations, 3 cr. (See EDFN-453 for description.)

EDFN-460 Administration and Supervision in Special Education, 3 cr. (Cross listed with SPED-470) Introduction to special education administration including legal and financial aspects, staff and community relations, mainstreaming, facilities, and curricular design. Students will have an opportunity to solve problems using case studies and simulated materials. *Prereq.:* graduate standing, EDFN-421, and SPED-410.

EDFN-470 Administrative Use of the Microcomputer, 3 cr. An overview of administrative uses of microcomputers in educational settings. Emphasis will be on data management functions. Focus on hardware and software for use with budgets, schedules, record keeping, data processing, and word processing. Also includes some programming and review of educational hardware systems and software packages. *Prereq.:* graduate standing and EDFN-421 or consent of instructor.

EDFN-480 The Community College, 3 cr. Provides the student with theoretical and practical knowledge about the philosophy, history, students, services, staff and organizational structure of the community college. National trends of the two year college will be analyzed. *Prereq.:* graduate standing and consent of instructor.

EDFN-481 Community College Administration, 3 cr. Administration in the community college setting; an examination of administrative behavior and decision-making within the institution; the relationship of the community college to its outside community and how that affects the administrator.

Prereq.: graduate standing; consent of instructor.

EDFN-490 Adult Learner, 3 cr. An examination of demographic changes fostering attention on adults as well as stages and phases of adult life and adult characteristics as a framework for effective planning, programming, and marketing of adult education. *Prereq.:* graduate standing.

ELEMENTARY EDUCATION

(See listing of faculty in the Department of Curriculum and Instruction section of this catalog.)

The Elementary Education Program, which is housed in the Department of Curriculum and Instruction, offers courses of study leading to the Bachelor of Arts degree. The major in Elementary Education is planned to provide students with substantial knowledge of philosophical and psychological elements of teaching and learning, general and specific methods of instruction, and clinical intern experiences of at least 100 hours in local schools prior to the full-day student teaching program.

More specifically, students completing the Elementary Education major will: 1) have theoretical and practical knowledge of principles of curriculum development and design in modern elementary schools; 2) have an ability to work effectively with children with various exceptionalities and from various racial-ethnic and socio-economic backgrounds; 3) know how to plan and implement instructional units, lessons and special learning activities in elementary school subject areas; 4) have achieved specialized knowledge of content, methodology, and instructional materials in elementary school subject areas; 5) effectively apply classroom management techniques demonstrating an understanding of group dynamics; and 6) have attained skills in planning and carrying out remedial or extra-challenging individualized learning programs based on diagnostic evaluations of children.

To achieve these goals, students enrolled in the Elementary Education major must select an approved minor or a second major in the College of Education or the College of Arts and Sciences.

Approved Minors are:

Art
English
Foreign Languages

Linguistics
Mathematics
Music
Natural Science
Reading
Social Science
Speech

Approved Second Majors are:

Bilingual-Bicultural Education
Early Childhood Education
Inner City Studies
Physical Education
Special Education
Learning Disabilities
Mental Retardation
Behavior Disorders

(Please refer to pertinent sections in this catalog for requirements of approved minors and second majors.)

NOTE: Students who major in both Elementary Education and Special Education and successfully complete all requirements (including application to the State of Illinois) are entitled to receive certification in both areas.

All Elementary Education majors must complete a minimum of 100 clock hours of clinical experience prior to student teaching to be eligible for State of Illinois teacher certification. Twenty hours of clinical experiences are completed in EDFN-306 and EDFN-307. The balance of clinical experiences is completed in the Elementary Education Program. In order to complete the clinical experience requirement, which requires placement in a public or private elementary school with a state certified teacher, students must first register in the **Office of Clinical Experiences**. Students must also contact the office of the Department of Curriculum and Instruction for formal approval to participate in clinical experiences.

All Elementary Education students must be admitted to the College of Education before they can register for Clinical Experience and Student Teaching. **To be entitled for certification a student must earn a grade of "B" or better in Student Teaching.**

UNDERGRADUATE PROGRAMS

Major in Elementary Education for the Bachelor of Arts Degree

Required Courses:

EDFN-305 Philosophical and Historical Foundations of Public Education.....3 cr.
EDFN-306 Education and Individual Differences.....3 cr.
EDFN-307 Psychology of Instruction and Learning.....3 cr.
C&I ELED/BLBC-301 Curriculum of the Elementary School.....3 cr.

C&I ELED/BLBC-302 Methods of Teaching Language Arts—Elementary School	3 cr.
C&I ELED/BLBC-304 Methods of Teaching Social Studies—Elementary School	3 cr.
C&I ELED/BLBC-305 Methods of Teaching Science—Elementary School	3 cr.
C&I ELED/BLBC-306 Methods of Teaching Reading—Elementary School	3 cr.
C&I ELED/BLBC-310 Methods of Teaching Mathematics—Elementary School	3 cr.
Select either (a), (b) or (c)	3 cr.
(a) C&I-ELED-319 Classroom Organization and Management	3 cr.
(b) C&I-ELED/BLBC-320 *Teaching the Slow-Learning and Gifted Child	3 cr.
(c) C&I-ECED/BLBC-312 Teaching Strategies with Multicultural Groups	3 cr.
C&I ELED/BLBC-329 Student Teaching in Elementary Education, K-9	9 cr.
Total	39 cr.

*All students who are also majoring in Special Education must take this course.

NOTE: All students wishing Chicago teacher certification must take an additional two credit hours of course work in Reading.

The above program is also required of undergraduate transfer students and graduates of accredited universities. All students must consult with an advisor in the Elementary Education Program. Students should request a copy of the *Guidebook for Students in Elementary Education* from a secretary in the Department of Curriculum and Instruction.

Additional Requirements for Certification:

In addition to the successful completion of the Elementary Education major and one of the approved minors or second majors, students must complete the **general education** requirements for the Illinois Standard Elementary Certificate. These requirements are:

Requirements which are a part of Northeastern's 42-hour General Education Program and are on the Limited List:

Fine Arts (6 hours)	
ART-180 Art for the Non-Art Major	3 cr.
MUS-102 Music Fundamentals I	3 cr.
Humanities (9 hours)	
English, Linguistics or Foreign Language	3 cr.
PHIL-101 Persuasion and Reason	3 cr.
Elective	3 cr.
Behavioral and Social Science (12 hours)	
HIST-214 United States History 1607-1877 or HIST-215 United States History 1877-Present	3 cr.
PSCI-AMER-216 American National Government	3 cr.
Non-Western or Third-World Cultures course	3 cr.
Elective	3 cr.
Natural Sciences (12 hours)	
(Includes Mathematics, only one course applicable)	

Science Laboratory Course	3 cr.
Electives	9 cr.
Interdisciplinary/Professional Studies (3 hours)	
C&I-INMD-116 Microcomputer Literacy for Educators	3 cr.
Total	42 cr.

General Education Requirements which are **not** on the Limited List:

ENGL-101 Writing I or ENGL-102 Writing II	3 cr.
SPCH-COMM-101 Foundations of Communication or SPCH-COMM-202 Voice and Diction	3 cr.
HPER-HLED-301 Health Education in Elementary School	3 cr.
Physical Education Activity	1 cr.
MATH-103 Mathematics for Elementary Teachers	3 cr.
Total	12 cr.

NOTE: All students seeking an Illinois Standard Elementary Education Certificate (K-9) must complete at least 6 credit hours in mathematics.

COURSE OFFERINGS

C&I-ELED-101 Orientation to Teaching in the Elementary School, 3 cr. This course explores the role of a teacher in the elementary school and opportunities for education majors. Academic and personal qualifications of teachers will be reviewed. The organizational structure of the elementary school system, the scope and sequence of the curriculum, and the general behavior and development of the elementary school child will be examined.

C&I-ELED/BLBC-301 Curriculum of the Elementary School, 3 cr. The relationship of theory to practice is studied in a variety of elementary curricula. Analyses and interpretations of teaching-learning processes are conducted. Special attention is directed to: (1) instructional objectives in planning, (2) application of theories of child development, learning, classroom management, and instructional methodology to multicultural curriculum development, (3) unit and lesson planning, and (4) evaluation techniques. Strategies for meeting the needs of learning disabled and mainstreamed exceptional children are explored.

Prereq: EDFN-306.

C&I-ELED/BLBC-302 Methods of Teaching Language Arts - Elementary School, 3 cr. Materials and techniques for the teaching of writing, speaking, and listening skills. The function of language in the life of the child, the relationship of language in other areas of learning as well as in multicultural settings. Attention given to mainstreaming the exceptional child and learning disabled in the regular elementary school classroom. Emphasis on middle and upper grades.

Prereq: C&I-ELED/BLBC-301.

C&I-ELED/BLBC-304 Methods of Teaching Social Studies - Elementary School, 3 cr. A study of instructional methods and materials for teaching social studies to normal, learning disabled and mainstreamed exceptional children in multicultural classrooms. Explores approaches to promoting

children's cognitive and affective concept formation, critical thinking, exploration of problems associated with methods of research and appreciation of cultural diversity. May be accompanied by supervised, sequential clinical experiences culminating in teaching student-developed instructional units. Classroom management techniques conducive to the implementation of successful individual and group unit projects are investigated. Emphasis on middle and upper grades.

Prereq: C&I-ELED/BLBC-301.

C&I-ELED/BLBC-305 Methods of Teaching Science - Elementary School, 3 cr. A study of instructional methods and materials for teaching science to normal, learning disabled, and mainstreamed exceptional children in multicultural classrooms. Emphasizes development of lessons to promote scientific thinking and utilization of basic scientific principles and experimentation. Includes classroom management strategies conducive to the implementation of successful individual and group science investigations. May be accompanied by sequential, supervised clinical experiences culminating in teaching student-developed instructional units. Emphasis on middle and upper grades. *Prereq:* C&I-ELED/BLBC-301.

C&I-ELED/BLBC-306A Methods of Teaching Reading - Elementary School with Clinical Experience, 3 cr. Examines current issues and research in the teaching of reading. Emphasis is given to exploring the instructional methods and materials for teaching reading to normal and mainstreamed exceptional children in multicultural classrooms. Principles of classroom management are included. Accompanied by 100 hours of supervised, sequential clinical experiences culminating in teaching student developed instructional units. Emphasis on middle and upper grades. *Prereq:* C&I-ELED/BLBC-301 and C&I ELED/BLBC 302.

C&I-ELED-306B Methods of Teaching Reading - Elementary School without Clinical Experience, 3 cr. For students who do not need the 100 hours of supervised, sequential clinical experiences. *Prereq:* C&I-ELED/BLBC-301.

C&I-ELED-307 Independent Study in Selected Problems in Elementary Education, 1 cr. An in-depth study designed for individual students who wish to pursue interests independently in specific areas of elementary education and teaching methodology through readings, investigations, field experiences, reports, and conferences under the guidance of department faculty. *Prereq:* consent of instructor.

C&I-ELED-308 Independent Study in Selected Problems in Elementary Education, 2 cr. (See C&I-ELED-307 for description.)

C&I-ELED-309 Independent Study in Selected Problems in Elementary Education, 3 cr. (See C&I-ELED-307 for description.)

C&I-ELED/BLBC-310 Methods of Teaching Mathematics-Elementary School, 3 cr. Development of methods, techniques, and teaching aids for the teaching of mathematical concepts to normal, mainstreamed exceptional and gifted students in multicultural classrooms. Appropriate techniques in classroom management are included. May be accompanied by sequential, supervised clinical experiences

culminating in teaching student-developed instructional units. *Prereq:* C&I-ELED/BLBC-301.

C&I-ELED-315 Teaching in the Inner City Elementary School, 3 cr. Educational problems inherent in the inner city milieu, exploration of developmental learning concerns as applicable in various ethnic groups; study of socio-economic conditions as relating to educational achievements. *Prereq:* C&I-ELED/BLBC-301.

C&I-ELED-319 Classroom Organization and Management, 3 cr. Designed for the beginning teacher; exploration of the various methods by which the classroom may be organized and brought to a level of discipline necessary for effective teaching, examination of such topics as mainstreaming, organizing for instruction, multicultural aspects, teacher-pupil rapport, class discussion, importance of motivation, techniques of discipline, and including the exceptional and disabled learner in the regular elementary school classroom.

Prereq: C&I-ELED/BLBC-301.

C&I-ELED/BLBC-320 Teaching the Slow-Learning and Gifted Child in the Elementary School, 3 cr. Exploration of needs and problems of gifted, talented, learning disabled, and slow learners in the regular elementary school classroom. Attention focused on providing each child with the most appropriate education in the least restrictive environment. Review of selected literature of relevant school and classroom organization, teaching strategies and case studies. *Prereq:* C&I-ELED/BLBC-301.

C&I-ELED-321 Concept Development Through Activities, 1 cr. Designed to investigate the use of activities in facilitating concept development in the elementary school. Includes discussions of the concepts, selection of appropriate and affective activities, and the actual construction of visual aids, manipulatives, and games to use in developing these concepts. The course varies; concentration areas are reading, mathematics, language arts, science, and social studies. *Prereq:* valid teaching certificate, a related methods course, or to be taken concurrently with a related methods course.

C&I-ELED-322 Concept Development Through Activities, 2 cr. (See C&I-ELED-321 for description and prerequisites.)

C&I-ELED-328 Clinical Experience in Elementary Education, 3 cr. Clinical experience in local elementary school classrooms involving supervised and graduated teaching interactions with children in selected subject areas. Bi-weekly seminars scheduled. Works to fulfill a minimum of 100 clock hours of clinical experiences required by the state for certification. *Prereq:* C&I-ELED/BLBC-301 and consent of chairperson.

C&I-ELED/BLBC-329 Student Teaching in Elementary Education, 9 cr. Sixteen weeks of full-day student teaching under the tutelage of a certified cooperating teacher. Students are required to take full responsibility for a class of elementary school students. Weekly two hour seminars. Regular visits and conferences with university supervisors. *Prereq:* successful completion of all course work in ELED/BLBC Education major, and approval of department chairperson and coordinator of student teaching.

C&I-ELED-403 Problems in Elementary Mathematics Instruction, 3 cr. Develops an understanding of principles and techniques of instruction in elementary school mathematics. Students will be expected to investigate research as it relates to the improvement of instruction in mathematics. *Prereq.: graduate standing.*

C&I-ELED-405 Problems in Elementary Social Studies Instruction, 3 cr. Develops an understanding of principles and techniques of instruction in elementary school social studies. Students will be expected to investigate research as it relates to the improvement of instruction in social studies. *Prereq.: graduate standing.*

C&I-ELED-406 Research Skills for the Classroom Teacher, 3 cr. Enables the regular classroom teacher to use tools and procedures that will demonstrate the working effectiveness of any instructional practice; thus, the teacher will develop data that will foster constructive decision-making for continued curriculum building. *Prereq.: graduate standing.*

C&I-ELED-414 Principles of Curriculum Development, 3 cr. Fundamental criteria for curriculum planning and the principal types of curriculum patterns as they apply to various subject-matter disciplines; emphasis focused on the student's subject area of specialization and its applicability to the improvement of the curriculum in the classroom and in the school; study of selection and organization of learning experiences, as well as objectives and evaluation. *Prereq.: graduate standing and consent of instructor.*

C&I-ELED-418 Classroom Problems in the Teaching-Learning Process, 3 cr. The contributions of learning psychologists that are applicable to the teaching-learning process; areas explored include implications of learning in curriculum design, instructional methods, educational decisions, and in the use of learning resources; relevant for the classroom teacher who attempts to utilize learning concepts in the classroom and in research. *Prereq.: graduate standing and consent of instructor.*

C&I-ELED-419 Problems in Elementary Language Arts Instruction, 3 cr. Development of an understanding of principles and techniques of instruction in elementary school language arts; students to investigate research as it relates to the improvement of instruction in language arts. *Prereq.: graduate standing.*

C&I-ELED-421 Seminar in Elementary Education, 3 cr. Timely seminars designed to afford opportunity for in-service elementary teachers to share in the scholarly interests of department staff, visiting faculty, and guest lecturers in current specialized areas of elementary curriculum and teaching. *Prereq.: graduate standing and consent of instructor.*

C&I-ELED-422 Problems in Elementary Science Instruction, 3 cr. Develops an understanding of principles and techniques of instruction in elementary school science. Students will be expected to investigate research as it relates to the improvement of instruction in science. *Prereq.: graduate standing.*

C&I-ELED-423 Extern Seminar in Elementary Education, 3 cr. Offered separately 1) to beginning teachers and 2) to experienced teachers. A series of in-service seminars

for elementary school teachers. The content of each seminar will be planned by the students to meet their needs. Resource people will assist in working toward solutions to the many practical problems confronting individual teachers or staff. The course may be repeated once. *Prereq.: graduate standing and consent of instructor.*

EXERCISE SCIENCE AND CARDIAC REHABILITATION

George Lesmes, Ph.D., Professor, Coordinator
C. Murray Ardies, Ph.D., Associate Professor
Richard Bonfiglio, M.D., Adjunct Professor
Leslie Brookfield, M.D., Adjunct Professor
Dorothy Confalone, R.N., Program Associate
David Cooke, M.D., Adjunct Professor
I. Martin Grais, M.D., Visiting Lecturer
Jeffrey Lakier, M.D., Adjunct Professor
Catherine A. Moran, M.S., Program Associate
Chadwick C. Prodromos, M.D., Adjunct Professor
Camille Serritella-Haltom, M.S., Program Associate
James Te Winkle, R.N., B.S.N., Program Associate

GRADUATE PROGRAM

Master of Science in Exercise Science and Cardiac Rehabilitation

The primary objective of this program is to train individuals in the evaluation, administration and prescription of medically-based exercise programs with special emphasis on preventive and rehabilitative physiology, wellness, health promotion, and risk reduction programming.

The program is designed for students with a broad range of backgrounds and with diversified goals. It is designed to provide the maximum theoretical and practical information concerning the functioning of the healthy, human body during exercise conditions and the assessment of risk to prevent disease. The rehabilitation of individuals with cardiovascular disorders is a major part of the program.

Practical applications of physiological concepts, in addition to research and health evaluations, are an integral part of the program. The major portion of the work will be conducted in The Center for Exercise Science and Cardiovascular Research. All students work under the guidance of a graduate advisor.

A three month internship and a 300 unit "preceptorship" are requirements of the program. This is designed to provide practical work experience in The Center for Exercise Science and Cardiovascular Research, the Community Health Enhancement Program, and approved clinical settings.

Requirements for Admission to the Program:

1. Students must fulfill the requirements for admission to the Graduate College.

2. A minimum of 21 credit hours of undergraduate coursework in a science related area with a minimum of one course in each of the following areas: biology, chemistry, anatomy, physiology and exercise physiology.
3. 3 letters of recommendation.
4. A statement of goals and purposes for pursuing the degree.
5. A departmental application form.
6. Previous experience in the area of exercise physiology and/or cardiac rehabilitation, health promotion, risk reduction, and research is preferred.

Requirements for the Degree:

The program consists of 36 credit hours of which eight "core" courses or 27 credit hours are required.

ESCR-331 Cardiovascular and Metabolic Physiology in Cardiac Rehabilitation.....	3 cr.
ESCR-332 Methods and Procedures of Graded Exercise Testing.....	3 cr.
ESCR-333 Cardiovascular Pharmacology.....	3 cr.
ESCR-401 Clinical Dimensions of Cardiac Rehabilitation.....	3 cr.
ESCR-402 Clinical Electrocardiography.....	3 cr.
ESCR-403 Statistical Analysis in Exercise Science and Cardiac Rehabilitation.....	3 cr.
ESCR-404 Research Design in Exercise Science and Cardiac Rehabilitation.....	3 cr.
ESCR-419 Internship: Exercise Science and Cardiac Rehabilitation.....	6 cr.
Total	27 cr.

Option I (non-thesis)

In addition to the "core" requirements listed above, 9 hours of electives must be completed from the elective list below.

Electives - 9 credit hours
Program total - 36 credit hours

Option II (thesis)

In addition to the "core" requirements, the following must be completed:

ESCR Research Thesis.....	6 cr.
Three credit hours of electives from the elective list below.	

Thesis - 6 credit hours
Electives - 3 credit hours
Program total - 36 credit hours

Electives:

ESCR-411 Independent Study in Exercise Science/Cardiac Rehabilitation.....	1 cr.
ESCR-412 Independent Study in Exercise Science/Cardiac Rehabilitation.....	2 cr.
ESCR-413 Independent Study in Exercise Science/Cardiac Rehabilitation.....	3 cr.
ESCR-420 Research Thesis.....	6 cr.

ESCR-421 Advanced Cardiovascular Physiology in Cardiac Rehabilitation.....	3 cr.
ESCR-422 Metabolic Adaptations to Physical Stress.....	3 cr.
ESCR-423 Seminar in Exercise Science and Cardiac Rehabilitation.....	3 cr.
ESCR-423A Seminar: Sports Physiology.....	3 cr.
ESCR-423B Seminar: Advanced Exercise Science and Cardiac Rehabilitation.....	3 cr.
ESCR-423C Seminar: Corporate Health Promotion.....	3 cr.
ESCR-423D Seminar: Pathophysiology.....	3 cr.
ESCR-423E Seminar: Advanced Electrocardiography.....	3 cr.
ESCR-424 Nutritional Alternatives in Cardiac Rehabilitation and Other Disease States.....	3 cr.
ESCR-425 Pulmonary Physiology in Cardiac Rehabilitation.....	3 cr.
ESCR-426 Nutrition, Metabolism, and Nutrient Interaction.....	3 cr.
ESCR-427 Current Topics in Nutrition for Selected Populations.....	3 cr.

The following certifications are a requirement of the degree program prior to graduation:

Advanced Cardiac Life Support (ACLS)
Exercise Test Technologist (ETT)

In addition to the requirements of the Graduate College for matriculation in graduate programs, students in the Master's program in Exercise Science and Cardiac Rehabilitation are allowed a maximum of two grades below "B" in program requirements and electives. A third grade below "B" will result in removal of the student from the program.

The Center for Exercise Science and Cardiovascular Research (CESCR)

The mission of The Center for Exercise Science and Cardiovascular Research at Northeastern Illinois University is to provide graduate level educational degree programs with a specific emphasis on the training of allied health professionals. The degree specialization focuses on exercise science, cardiac rehabilitation, nutrition, and disease prevention. The Center is committed to providing empirical research with an emphasis on cardiovascular, pulmonary, and metabolic diseases and the investigation of the therapeutic effects of exercise, nutrition, and education on lifestyle, diseases, and behavioral problems.

Corporate Outreach Program

Presently, many corporations and municipalities work with The Center for Exercise Science and Cardiovascular Research. The Center provides a variety of programs/services for its corporate clients such as pre-employment physicals, executive physical evaluations, implementation of employee risk reduction and intervention programs, and an on-campus exercise program (Community Health Enhancement Pro-

gram). The Center is primarily involved in developing a computerized systematic database to investigate the impact of health care/risk reduction programs on the rising health care costs. The corporations involved in our Corporate Health Care/Cost-Containment program are part of the research group.

Community Health Enhancement Program (CHEP)

The Community Health Enhancement Program (CHEP) is a medically supervised exercise program for individuals living or working in the adjacent community, Northeastern employees, and corporate clients. Since 1980, CHEP has serviced approximately 3000 individuals from the community and the university. CHEP provides the opportunity for Masters degree students to assist participants in achieving optimal health and wellness through a personalized exercise program. Based on the results of physiological evaluations, an exercise program is prescribed to suit the needs and goals of the participants. In addition, educational intervention programs and seminars are provided to address various health care issues.

Schwab Rehabilitation Center Affiliation

In 1988, Schwab Rehabilitation Center, a division of Mount Sinai Medical Center, and Northeastern Illinois University signed an affiliation agreement which provides Schwab's residents in physical medicine and rehabilitation (physiatry) with a 3 month rotation to work in The Center for Exercise Science and Cardiovascular Research.

Schwab's staff collaborates with the Center faculty on research projects pertaining to exercise science, physical medicine, and cardiac rehabilitation.

This affiliation with Schwab Rehabilitation Center enables The Center for Exercise Science & Cardiovascular Research to offer its corporate clients and municipalities evaluations such as physical therapy, work capacity (job specific), work hardening, repetitive motion injury, and ergonomic evaluation of job site through Schwab's STEPS Industrial Injury Clinic.

COURSE OFFERINGS

ESCR-203 Field Experiences, 3 cr. Field work in exercise science and cardiac rehabilitation. Preparation of a paper on the nature of the student's work, objectives, and experiences. *Prereq.: consent of instructor.*

ESCR-204 Physiology of Exercise, 3 cr. Effects of muscular activity on the systems of the body; emphasis on the nature of neuromuscular activity, circulatory, and respiratory adjustments during exercise, metabolic and environmental aspects of exercise, fatigue and training, and fitness and health. *Prereq.: six credit hours in general biology.*

ESCR-331 Cardiovascular and Metabolic Physiology in Cardiac Rehabilitation, 3 cr. Designed to provide the student with an in-depth knowledge of the cardiovascular

and metabolic systems at rest and during exercise. Course examines various parameters of homeostatic control with an emphasis on how they relate to the cardiac rehabilitation patient. *Prereq.: admission to the Master of Science degree program and consent of instructor.*

ESCR-332 Methods and procedures of Graded Exercise Testing, 3 cr. Designed to acquaint the student with methods, procedures, and techniques of diagnostic and functional exercise testing. Student will develop aptitude and knowledge regarding evaluation and referral procedures, data interpretation, protocol, and equipment. *Prereq.: admission to the Master of Science degree program and consent of instructor.*

ESCR-333 Cardiovascular Pharmacology, 3 cr. Course is designed to provide the student with the mechanisms and pharmacological effects of medications during diagnostic graded exercise testing, health evaluations, exercise prescriptions and emergency procedures. Special emphasis will be given to application in the clinical and non-clinical setting. *Prereq.: ESCR 332 and consent of instructor.*

ESCR-401 Clinical Dimensions of Cardiac Rehabilitation, 3 cr. Course is designed to acquaint the student with various common clinical states and diseases affecting the cardiovascular system with primary emphasis on coronary artery disease. Diagnosis, treatment, and various aspects of cardiac rehabilitation will be emphasized. *Prereq.: graduate standing, ESCR 332 and ESCR 402.*

ESCR-402 Clinical Electrocardiography, 3 cr. Course is designed to acquaint the student with the basics of normal and abnormal resting and exercise electrocardiograms. Special attention will be given to the thorough study of clinical electrocardiograms and intensive investigations of documented clinical case studies. *Prereq.: graduate standing and ESCR 332.*

ESCR-403 Statistical Analysis in Exercise Science and Cardiac Rehabilitation, 3 cr. For the student who is not a mathematical science major or minor, but requires a knowledge of application of descriptive statistics. Application to problems in science, with special emphasis in exercise physiology/cardiac rehabilitation. *Prereq.: graduate standing and ESCR 332.*

ESCR-404 Research Design in Exercise Science and Cardiac Rehabilitation, 3 cr. An organized working team will study and perform cooperative research in an area of exercise physiology/cardiac rehabilitation. Special emphasis will be placed on proper organization of research problems. *Prereq.: graduate standing and ESCR 332.*

ESCR-411 Independent Study in Exercise Science and Cardiac Rehabilitation, 1 cr. A laboratory project or library study of a related topic to exercise physiology/cardiac rehabilitation. Emphasis will be placed on planning, carrying out, and writing a report on a project agreed upon by the student and advisor. *Prereq.: graduate standing and consent of instructor.*

ESCR-412 Independent Study in Exercise Science and Cardiac Rehabilitation, 2 cr. (See ESCR 411 for description).

ESCR-413 Independent Study in Exercise Science and Cardiac Rehabilitation, 3 cr. (See ESCR 411 for description).

ESCR-419 Internship: Exercise Science and Cardiac Rehabilitation, 6 cr. Designed to provide the student with work experience in a clinical, corporate, or institutional environment. In addition, the American College of Sports Medicine's Exercise Test Technologist and Advanced Cardiac Life Support certification is required. *Prereq.: graduate standing and consent of instructor.*

ESCR-420 Research Thesis, 6 cr. Faculty guidance for students conducting research and writing a thesis is required to fulfill the requirements of the Master of Science in Exercise Science and Cardiac Rehabilitation. *Prereq.: graduate standing and consent of instructor.*

ESCR-421 Advanced Cardiovascular Physiology in Cardiac Rehabilitation, 3 cr. Mechanisms of control of the cardiovascular system as they pertain to human subjects at rest and during exercise, with special emphasis on cardiac rehabilitation patients. Topics will include advanced knowledge of the control of cardiovascular physiology; the effects of ionic and antiarrhythmic drugs; hypertension, its pathology and control; the failing heart; and the cardiovascular controlling hormones. The integration of these factors will be emphasized as to how they affect exercising man. *Prereq.: graduate standing and ESCR 333.*

ESCR-422 Metabolic Adaptations to Physical Stress, 3 cr. Implications of physical stress to the structure of human skeletal muscle. Special emphasis will be placed on cellular adaptation of the energy producing metabolic pathways. *Prereq.: graduate standing and ESCR 333.*

ESCR-423 Seminar in Exercise Science and Cardiac Rehabilitation, 3 cr. These seminars provide students with the opportunity to engage in a variety of topics salient to their professional growth and development. *Prereq.: graduate standing and ESCR 333.*

ESCR-424 Nutritional Alternatives in Cardiac Rehabilitation and Other Disease States, 3 cr. Nutrient and food energy needs of the human biological system throughout the life cycle. Consideration of the role of nutrition in preventive health care and in various disease states, including cardiovascular disease, diabetes, obesity, and renal disease. *Prereq.: graduate standing and ESCR 333.*

ESCR-425 Pulmonary Physiology in Cardiac Rehabilitation, 3 cr. The study of the physiochemical principles underlying respiratory processes; the neurohumoral reflexes governing the homeostatic respiratory adjustments to perturbations in the oxygen supply in the external and internal environment and in the bodily oxygen demands; the pathophysiological consequences of partial impairment of the respiratory processes. Special emphasis will be directed to the rehabilitation of cardiac patients. *Prereq.: graduate standing and ESCR 333.*

ESCR-426 Nutrition, Metabolism, and Nutrient Interaction, 3 cr. In depth treatment of digestion, absorption, transport and utilization of dietary fats, carbohydrates, protein, and vitamins. Emphasis on nutrient interaction and proper food selection for healthy people and patients with cardiovascular disease. *Prereq.: graduate standing, ESCR 333 and ESCR 424.*

ESCR-427 Current Topics in Nutrition for Selected Populations, 3 cr. Analysis and review of current literature dealing with nutritional needs of various populations, including cardiac patients, diabetics and the obese. *Prereq.: graduate standing and ESCR 331.*

HEALTH, PHYSICAL EDUCATION, RECREATION, AND ATHLETICS

Daniel Creely, Ed.S., Associate Professor
 Ronald Faloona, M.P.E.H., Assistant Professor
 Betty Fields, M.P.E.H., Assistant Professor
 Frank Hostetler, H.S.D., Professor
 Violet Johnson, Ph.D., Assistant Professor
 Raymond Kasper, M.S., Assistant Professor
 Joan Leafman, Ph.D., Assistant Professor
 Sam Lollar, Ph.D., Assistant Professor
 Betty Meyer, M.A., Associate Professor
 Dolores Petty, M.A., Associate Professor
 Eleanor Prueske, Ph.D., Professor
 Anthony Schimpf, Ed.D., Associate Professor
 John Waechter, P.E.D., Professor, Chairperson

The Department of Health, Physical Education, Recreation and Athletics is located in the Physical Education Building at the south end of the campus. Opened in January, 1988, the facility includes two gymnasiums, suspended jogging track, six racquetball courts, a 60 x 120 foot swimming pool, a weight training room, classrooms, and department offices.

The goals of the Department are to provide students with 1) an awareness of the role of health, physical education, leisure and recreation, and athletics in schools and society; 2) the opportunity to acquire competencies that will enable them to be successful in varied educational and professional settings; 3) the opportunity to develop a satisfactory level of personal skill in the many areas of the discipline; and 4) a basis and desire for continued professional growth following graduation.

The Department of Health, Physical Education, Recreation, and Athletics offers two Bachelor of Arts Degrees.

Undergraduate majors are:

- Leisure Studies
- Physical Education
- Secondary Physical Education

Undergraduate minors are:

- Health Education
- Physical Education

In addition, several areas of concentration are provided for Human Resource Development majors. (See the Human Resource Development section of this catalog.)

All undergraduates, with their advisor's consent, may choose major courses in physical education as electives credited toward graduation. (HPER-HLED,-LEST,-PEMA,-PEMT pre-fixes)

Serving the entire university community, the department is concerned with educating students in health, physical education, recreation, physical well-being, and leisure time activities. Extracurricular programs for men and women include intramurals, special events, and intercollegiate athletics. Schedules for the pool, gymnasium, and tennis courts allow and encourage students to participate in recreational activities. The faculty assist students in developing skills which contribute to self-confidence, mental and physical well-being, tension release, and socialization.

Adaptive programs are outlined (with physician's approval) for students with special medical needs.

UNDERGRADUATE PROGRAMS

Students interested in a physical education major or a Leisure Studies major must make an appointment with the appropriate department advisor to develop an individualized academic program. The Professional Standards Committee of the department reviews faculty recommendations for students requiring special attention and meets with the student to discuss and remedy any weaknesses.

In addition to the College of Education requirements for admission and retention, the Department requires the following before students will be allowed to participate in an internship or register for the courses that immediately precede student teaching:

1. a 2.75 (on a 4.0 scale) grade point average in all major courses;
2. removal of all incomplete grades in courses offered by the department;
3. satisfactory completion of and certification in Advanced Life Saving (PEMA-281) (for students seeking Secondary teaching certification only);
4. satisfactory completion of all required courses in both professional education and major;
5. permission of the department advisor.
6. admission to the College of Education.

"Second Major" in Physical Education for the Bachelor of Arts Degree in Elementary Education

The major in Physical Education is designed for students who also major in Elementary Education, as well as those who choose another first major. Those who choose the Elementary Education major are entitled to Illinois State Teacher Certification, grades K-9, upon successful completion of the program and graduation from Northeastern Illinois University. (Those who desire certification as Physical Education Specialists, grades K-12, apply to the Illinois State

Teacher Certification Board upon graduation on an individual basis.) **Student Teaching for this program is scheduled for the Fall term only. To be entitled for certification, students must earn a grade of "B" or better in Student Teaching.**

Required Courses:

HPER-HLED-101	Standard First Aid and Personal Safety	1 cr.
*HPER-PEMA-301	Health Education in Elementary School	2 cr.
HPER-PEMA-131	Beginning Gymnastics	1 cr.
HPER-PEMA-151	Fundamentals of Rhythms	3 cr.
HPER-PEMA-191	Beginning Stunts, Tumbling, and Trampoline	1 cr.
HPER-PEMA-281	Advanced Lifesaving	1 cr.
HPER-PEMA-293	Movement Education	2 cr.
HPER-PEMA-341	Foundations of Physical Education for Elementary Schools (Taken just prior to student teaching)	3 cr.
HPER-PEMA-201	Principles and Methods in Physical Education	3 cr.
HPER-PEMA-204	Physiology of Exercise	3 cr.
HPER-PEMA-302	Kinesiology	3 cr.

Select one of the following:

HPER-PEMA-202	Tests and Measurements in Physical Education	3 cr.
HPER-PEMA-303	Adapted Physical Education and Recreation	3 cr.

Select two of the following:

HPER-PEMA-152	Judo and Self-Defense	1 cr.
HPER-PEMA-153	Foil Fencing	1 cr.
HPER-PEMA-161	Badminton	1 cr.
HPER-PEMA-162	Bowling	1 cr.
HPER-PEMA-163	Golf	1 cr.
HPER-PEMA-164	Archery	1 cr.
HPER-PEMA-165	Tennis	1 cr.
HPER-PEMA-203	Weight Training	2 cr.
HPER-PEMA-277	Foundations of Wrestling	1 cr.

Select two of the following:

HPER-PEMA-171	Softball	1 cr.
HPER-PEMA-172	Basketball	1 cr.
HPER-PEMA-173	Volleyball	1 cr.
HPER-PEMA-271	Track and Field	1 cr.
HPER-PEMA-273	Flag Football	1 cr.
HPER-PEMA-276	Soccer, Speedball, and Football	1 cr.

Total 30 cr.

*Meets ISBE Health and Physical Education requirement.

Major in Secondary Physical Education for the Bachelor of Arts Degree

Secondary Physical Education majors, upon successful completion of the program and graduation from Northeastern Illinois University, are entitled to Illinois State Teacher Certification, grades 6-12. The program includes the 27 credit hour

Secondary Education Professional Program (includes HPER-PEMT-201) and 38 credit hour Secondary Physical Education Major. Students are encouraged to complete one or more minor programs; e.g., Leisure Studies and/or Health Education. **Student Teaching for this program is scheduled for the Spring semester only.**

Unique to the Secondary Physical Education Major is the Block Program which is taken during the Fall Semester of the Senior year. In the Block Program, major and professional study courses are taken on campus during the morning hours. Majors are involved with programs at cooperating schools from noon until 5:00 p.m. (subject to the schedule of the cooperating school). Six weeks are spent in a suburban high school and six weeks are spent in a Chicago high school.

Required Courses:

HPER-HLED-101	Standard First Aid and Personal Safety	1 cr.
HPER-PEMA-131	Beginning Gymnastics	1 cr.
HPER-PEMA-151	Fundamentals of Rhythms	3 cr.
HPER-PEMA-181	Advanced Swimming Techniques (Exempt by proficiency)	1 cr.
HPER-PEMA-191	Beginning Stunts, Tumbling, and Trampoline	1 cr.
HPER-PEMA-252	Folk, Round and Square Dance	1 cr.
HPER-PEMA-271	Track and Field	1 cr.
HPER-PEMA-281	Advanced Lifesaving	1 cr.
HPER-PEMA-292	Intermediate Tumbling, Gymnastics and Trampoline	1 cr.
HPER-PEMA-381	Water Safety Instructor	2 cr.
HPER-PEMT-204	Physiology of Exercise	3 cr.
HPER-PEMT-302	Kinesiology	3 cr.
HPER-PEMT-342F	Pro-Seminar: Social Aspects of Physical Education in Contemporary Society (taken concurrently with C&I-SCED-305P)	3 cr.

Select one of the following:

HPER-PEMT-202	Tests and Measurements in Physical Education	3 cr.
HPER-PEMT-303	Adapted Physical Education and Recreation	3 cr.

Select two of the following:

HPER-PEMA-152	Judo and Self-Defense	1 cr.
HPER-PEMA-153	Foil Fencing	1 cr.
HPER-PEMA-161	Badminton	1 cr.
HPER-PEMA-162	Bowling	1 cr.
HPER-PEMA-163	Golf	1 cr.
HPER-PEMA-164	Archery	1 cr.
HPER-PEMA-165	Tennis	1 cr.
HPER-PEMA-203	Weight Training	2 cr.
HPER-PEMA-277	Foundations of Wrestling	1 cr.

Courses blocked in Fall Trimester:

HPER-PEMA-344	Foundations of Physical Education for Secondary Schools	3 cr.
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HPER-PEMT-311	Coaching and Team Management—High School	3 cr.
HPER-PEMT-321	Intramurals-High School	3 cr.
HPER-PEMT-341	Organization of High School Classes	3 cr.

Select two of the following:

HPER-PEMA-171	Softball	1 cr.
HPER-PEMA-172	Basketball	1 cr.
HPER-PEMA-173	Volleyball	1 cr.
HPER-PEMA-273	Flag Football	1 cr.
HPER-PEMA-276	Soccer, Speedball, and Football	1 cr.

Total 41 cr.

Major in Leisure Studies for the Bachelor of Arts Degree

The Leisure Studies Program is a multidisciplinary program designed to give students knowledge of various aspects of contemporary leisure, and provide working approaches to the solution of leisure problems. In the Leisure Studies Program, students will be trained to supervise and conduct recreational programs. This major provides students with professional preparation for work with municipal parks and recreation agencies, youth service agencies, senior citizen agencies, industrial recreation, therapeutic recreation, church recreation, and campus intramural and recreational programs. The program also prepares the student for graduate study in the field of recreation and leisure studies.

Leisure Studies majors must be fully admitted to the College of Education prior to registering for HPER-LEST-300 Leisure Studies Internship and Seminar.

Required Courses:

Leisure Studies Core:

HPER-LEST-201	Principles of Practices of Recreation and Leisure	3 cr.
HPER-LEST-202	Camping and Outdoor Recreation	3 cr.
HPER-LEST-203	History and Philosophy of Leisure	3 cr.
HPER-LEST-204	Leisure, Culture, and Society	3 cr.
HPER-LEST-302	Leisure Economics	3 cr.
HPER-PEMT-303	Adapted Physical Education and Recreation	3 cr.
HPER-LEST-320	Leisure Studies Internship and Seminar	12 cr.

Administration and Management

MNGT-370	Introduction to Management	3 cr.
ECON-215	Principles of Macroeconomics	3 cr.
ECON-217	Principles of Microeconomics	3 cr.
PSCI-AMER-216	American National Government	3 cr.
PSCI-PA-332	Public Administration	3 cr.

Total 45 cr.

UNDERGRADUATE MINORS**Minor in Health Education (20 cr. hrs.)**

Required Health Education Component—one course from each of the following areas to total 10-14 credit hours:

Advanced Concepts of Health

HPER-HLED-312 Current Health Concepts.....3 cr.

Programs in School Health

HPER-HLED-304 Organization and Administration of the School Health Program.....3 cr.

Programs in Community Health

HPER-HLED-103 Community Health.....3 cr.
HPER-PEMT-203Z Field Experience: Community Health Services.....3 cr.

Curriculum Development and Evaluation in Health Education

HPER-HLED-301 Health Education in the Elementary School.....2 cr.
HPER-HLED-305 Health Education in the Secondary School.....2 cr.

Additional Health Education Component—one course from at least three of the following areas to total 6-10 credit hours:

The Growing and Developing Organism

PSYC-212 Child Psychology.....3 cr.
PSYC-329 Adolescent Psychology.....3 cr.

Ecological Relationships

BIOL-104 The Changing Natural Environment.....3 cr.
G&ES-307 Environmental Education Seminar.....3 cr.

Disease Control

HPER-HLED-307 Human Diseases.....3 cr.

Human Sexuality and Family Life

HPER-HLED-105 Preparation for Marriage.....2 cr.
HPER-HLED-303 Sex Education.....3 cr.
HPER-HLED-306 Seminar in Trends and Issues in Sex Education.....3 cr.
SOC-214 Sociology of Marriage and the Family.....3 cr.

Food Practice and Eating Patterns

HPER-HLED-210 Nutrition and Health.....2 cr.

Consumer Health Sources and Resources

HPER-HLED-212 Consumer Health.....3 cr.
HPER-PEMT-342B Pro-Seminar: Women and Health Care.....3 cr.

Safety

HPER-HLED 101 Standard First Aid and Personal Safety.....1 cr.
HPER-HLED-111 Cardiopulmonary Resuscitation.....1 cr.

HPER-HLED-202 Safety Education.....3 cr.
HPER-HLED-206 Standard First Aid Instructor.....2 cr.
HPER-HLED-310 Advanced First Aid and Emergency Care.....4 cr.
HPER-HLED-311 Advanced First Aid Instructor.....1 cr.

Mood-Modifying Substances

CHEM-102 The Chemistry of Drugs.....3 cr.
BIOL-107 Biological Effects of Food and Drugs.....3 cr.
SOC-206 Sociology of Drug Abuse.....3 cr.
PSYC-345 Seminar in Drug Abuse.....3 cr.

Personal Health Practices

HPER-HLED-107 Health for Effective Living.....2 cr.
HPER-HLED-308 Principles of Individual Health Practices.....3 cr.

Mental/Emotional Health

HPER-PEMT-342A Pro-Seminar: Aging, Dying and Death.....3 cr.
PSYC-128 Psychology of Mental Health.....3 cr.

NOTE: The Health Education Minor provides the minimal requirement for teaching health in Illinois. An individual must have a major for teaching and have completed student teaching in order to apply the minor in Health Education.

Minor in Leisure Studies (18 cr. hrs.)**Required Courses:**

HPER-LEST-201 Principles and Practices of Recreation and Leisure.....3 cr.
HPER-LEST-202 Camping and Outdoor Recreation.....3 cr.
HPER-LEST-204 Leisure, Culture, and Society.....3 cr.
HPER-LEST-302 Leisure Economics.....3 cr.
HPER-LEST-304 Organization and Administration of Leisure Programs.....3 cr.
HPER-PEMT-303 Adapted Physical Education and Recreation.....3 cr.
Total 18 cr.

Minor in Physical Education (20 cr. hrs.)**Required Courses:**

HPER-HLED-101 Standard First Aid and Personal Safety.....1 cr.
HPER-PEMA-181 Advanced Swimming Techniques.....1 cr.
HPER-PEMT-201 Principles and Methods in Physical Education.....3 cr.

Choose one of the following:.....1 cr.
HPER-PEMA-131 Beginning Gymnastics.....1 cr.
HPER-PEMA-191 Beginning Stunts, Tumbling and Trampoline.....1 cr.

Choose two of the following:.....2 cr.
HPER-PEMA-171 Softball.....1 cr.
HPER-PEMA-172 Basketball.....1 cr.
HPER-PEMA-173 Volleyball.....1 cr.

HPER-PEMA-271 Track and Field.....1 cr.
HPER-PEMA-276 Soccer, Speedball, and Football 1 cr.

Choose one of the following:.....3 cr.
HPER-PEMT-202 Tests and Measurements in Physical Education.....3 cr.
HPER-PEMT-204 Physiology of Exercise.....3 cr.
HPER-PEMT-303 Adapted Physical Education and Recreation.....3 cr.
HPER-PEMT-312 Sport and Society.....3 cr.
Electives:.....9 cr.
Electives to be selected in consultation with advisor. _____

Total 20 cr.

COURSE OFFERINGS**Health Education**

HPER-HLED-101 Standard First Aid and Personal Safety, 1 cr. American Red Cross standard course in first aid.

HPER-HLED-103 Community Health, 3 cr. Purposes and principles of a community health program; identification of major community health problems; responsibilities of individual citizens and voluntary and governmental health agencies; planning for community health action.

HPER-HLED-105 Preparation for Marriage, 2 cr. Analysis of factors in emotional, biological, social, and spiritual maturity as they relate to the individual, marriage, and the family.

HPER-HLED-107 Health for Effective Living, 2 cr. Consideration of concepts related to the physical, mental, and social dimensions underlying personal health. Emphasis upon motivation for intelligent self-direction of health behavior based upon current scientific facts.

HPER-HLED-111 Cardiopulmonary Resuscitation, 1 cr. The course will provide the student with the necessary physical skills, as well as pertinent background information of how, when, and under what circumstances to perform cardiopulmonary resuscitation (CPR). Students who successfully complete this course receive American Health Association Certification.

HPER-HLED-202 Safety Education, 3 cr. Safety education in elementary and secondary schools. Sources of materials; coordination with agencies furthering safety within and outside the schools; practical application of safety education.

HPER-HLED-206 Standard First Aid Instructor, 2 cr. American Red Cross advanced course in first aid and opportunity for authorization as an instructor. *Prereq.: HPER-HLED-101 or consent of instructor.*

HPER-HLED-210 Nutrition and Health, 2 cr. Principles of nutrition and its relationship to man's health. Emphasis on practical application of current information to evaluate present nutritional status, weight control, selection of foods, and dietary habits.

HPER-HLED-212 Consumer Health, 3 cr. Prepares the student to make wise choices in the selection of health products and health services. Emphasis on proper utilization of the health care system and evaluation of products and services with regard to cost and impact on physical and mental health. Includes identification of reliable sources of health-related information, laws and agencies to protect the consumer.

HPER-HLED-301 Health Education in Elementary School, 2 cr. Preparation for teachers of health education in the elementary grades. Emphasis on curriculum, methods, organization, and presentation of materials.

HPER-HLED-303 Sex Education, 3 cr. Emphasis upon human reproduction, family life, marriage, and parenting problems. Instructional methods and materials for educators are presented.

HPER-HLED-304 The Organization and Administration of the School Health Program, 3 cr. Organization of school health programs and administrative policies related to school health services, school health instruction, and healthful school living.

HPER-HLED-305 Health Education in the Secondary School, 2 cr. Subject matter selection and organization for teaching purposes; correlation potential of health instruction in school subjects, methods of presentation, educational principles in health. Emphasis upon the professional and legal responsibilities of the secondary teacher in the total school health program.

HPER-HLED-306 Seminar in Trends and Issues in Sex Education, 3 cr. A critical analysis of current trends and basic issues of sex education with emphasis on selected independent study. *Prereq.: consent of instructor.*

HPER-HLED-307 Human Diseases, 3 cr. Nature, prevention, control, and treatment of communicable, chronic, and degenerative diseases, the general principles of resistance and causality of disease; man's interaction with his environment and total pattern of living as the primary source of disease.

HPER-HLED-308 Principles of Individual Health Practices, 3 cr. Independent study of a health problem in depth. Arrangement of subject, research, and follow-up with instructor. *Prereq.: consent of instructor.*

HPER-HLED-310 Advanced First Aid and Emergency Care, 4 cr. Designed to develop the functional first aid capabilities required of policemen, firemen, emergency squad members, ambulance attendants, and others, who as a part of their daily routine may be required to provide the initial emergency care necessary to sustain life until the victim of an accident or sudden illness is cared for by qualified medical personnel.

HPER-HLED-311 Advanced First Aid Instructor, 1 cr. Preparation for teaching the American Red Cross Advanced First Aid and Emergency Care course in the schools or community. Appropriate for all students desiring to serve in the community. Students must be at least 21 years of age at the beginning of the course to earn an American Red Cross

Advanced First Aid and Emergency Care Instructor's Certificate. *Prereq.:* consent of instructor.

HPER-HLED-312 Current Health Concepts, 3 cr. Advanced study and application of health sciences, human ecology health conservation, and the quality of life which encourages the attainment of optimal health. Emphasis upon the wholistic lifestyle.

Leisure Studies

HPER-LEST-201 Principles and Practices of Recreation and Leisure, 3 cr. Development of the recreation movement relative to leisure time. Emphasis on the principles and practices relative to a recreation and leisure program.

HPER-LEST-202 Camping and Outdoor Recreation, 3 cr. Present status, purposes, and organization administration of outdoor recreation programs for public, voluntary, and commercial agencies. Organization and administration of camps; program planning and staffing; health and safety.

HPER-LEST-203 History and Philosophy of Leisure, 3 cr. The historical development of work, leisure, and leisure phenomena; the development of philosophical attitudes towards leisure.

HPER-LEST-204 Leisure, Culture, and Society, 3 cr. The relationship of social structure to leisure; the impact of leisure on values; recreation as a social and socializing leisure activity. Comparative studies of leisure, leisure values, and leisure activities in different culture and sub-cultures.

HPER-LEST-205 Introduction to Travel and Tourism, 3 cr. This survey class is designed to provide students with an overview of travel and tourism as an area of study. Discussions will center on tourism at the regional, national, and international levels. Touristic behavior and the social, environmental, and economic impacts of tourism will be discussed.

HPER-LEST-206 Commercial Recreation, 3 cr. This course is an overview of the organization and function of commercial recreation; it provides information relating to commercial goods and services offered in the leisure market.

HPER-LEST-302 Leisure Economics, 3 cr. Leisure phenomena and the work ethic; the impact of leisure on the economy; the economic significance of discretionary time, discretionary income, and discretionary values.

HPER-LEST-303 Recreation and Leisure Facilities, 3 cr. A study of the design and construction of functional areas for recreational and leisure facilities. Emphasis on land use patterns, layouts, maintenance, utilization, planning, and management.

HPER-LEST-304 Organization and Administration of Leisure Programs, 3 cr. An examination of the organization and administration of recreation and leisure programs in public and private agencies. Included will be an emphasis on personnel, programs, evaluation, finance, and liability.

HPER-LEST-305 Commercial Recreation Attractions and Facilities, 3 cr. Provides information on the resource characteristics; location and market aspects; and operational considerations of several prominent commercial recreation

enterprises. The student will be exposed to a wide range of information pertaining to the establishment or the operation of these enterprises. *Prereq.:* HPER-LEST-205 and HPER-LEST-206.

HPER-LEST-306 Development of the Recreation Resource 3 cr. This course is designed to acquaint the student with the basic elements of the planning process necessary for commercial recreation, or tourist related areas. Planning philosophy, information sources, political realities, and behavioral survey methods will be stressed. *Prereq.:* HPER-LEST-205 and HPER-LEST-206.

HPER-LEST-320 Leisure Studies Internship and Seminar, 12 cr. On-the-job skill development in a recreation agency in the metropolitan Chicago area. The internship is arranged in a recreation agency under the direct supervision of the instructor and a cooperating recreation specialist. *Prereq.:* consent of instructor.

Physical Education Major Activity

HPER-PEMA-131 Beginning Gymnastics, 1 cr. Fundamentals, rules and regulations, skill practice, safety techniques, and coaching.

HPER-PEMA-151 Fundamentals of Rhythms, 3 cr. Includes basic axial and locomotor movements, spontaneous and planned interpretive response, knowledge of the aspects of rhythm, designing of a rhythm instrument, dramatization, marching patterns; rhythmic activities utilizing basic dance steps, and beginning folk and square dance.

HPER-PEMA-152 Judo and Self-Defense, 1 cr. Examination and practical application of judo and self-defense techniques. Special emphasis on proper training methods, physical conditioning, teaching techniques, and rules and regulations in contests.

HPER-PEMA-153 Foil Fencing, 1 cr. Instruction and drills in basic skills: footwork, lunge, simple and compound attacks, various defensive maneuvers, offensive and defensive strategies. Rules, judging and directing, bouts and tournaments.

HPER-PEMA-161 Badminton, 1 cr. Introduction to basic skills: clear shots, serves, drop shots, smashes, offensive and defensive strategies. Rules, singles and doubles; tournaments.

HPER-PEMA-162 Bowling, 1 cr. Theory and practice; rules, regulations, skill practice, tournament play and handicapping, and coaching.

HPER-PEMA-163 Golf, 1 cr. Instruction designed for beginning and experienced golfers in proper use of woods; long, middle, and short iron shots; putting, and specialty shots. Etiquette and rules of golf; visitations to driving range and golf course.

HPER-PEMA-164 Archery, 1 cr. Instruction in basic techniques of shooting a bow. Knowledge on all phases of archery: history, rules, care and use of equipment. Tournaments at various distances.

HPER-PEMA-165 Tennis, 1 cr. Instruction designed for the beginning player with major emphasis on the serve, forehand/backhand ground strokes. Additional instruction with

the lob, volley, and overhead. Singles/doubles play and strategies. Rules, tennis etiquette, and tournaments.

HPER-PEMA-166 Recreational Games, 1 cr. Choosing, teaching, and organizing informal recreational activities, including non-traditional, creative activities, sedentary, competitive and cooperative play situations.

HPER-PEMA-167 Field Hockey, 1 cr. History, theory and practice, rules and regulations, skill practices, purchase and care of equipment, team organization, strategy, competition, and safety measures.

HPER-PEMA-171 Softball, 1 cr. Emphasis on basic softball skills, team offensive and defensive strategies, rules, interpretations, and umpiring mechanics with practical umpiring experience during games.

HPER-PEMA-172 Basketball, 1 cr. Review of skills with emphasis on team drills and team play. Thorough coverage of rules and mechanics of officiating. Practical use of officiating techniques during games. Team tournaments as well as a one-on-one tournament.

HPER-PEMA-173 Volleyball, 1 cr. Basic instruction in power volleyball skills; serving, passing, spiking. Offensive and defensive team play, rules, strategies, and tournaments.

HPER-PEMA-181 Advanced Swimming Techniques, 1 cr. Instruction in the basic strokes and in elementary diving front and back, safety skills in and near the water, and activities to increase endurance. *Prereq.:* HPER-PESV-105 or consent of instructor.

HPER-PEMA-191 Beginning Stunts, Tumbling, and Trampoline, 1 cr. Fundamentals, rules, skill practices, progressions, spotting techniques and safety measures, teaching methods and materials, and purchase and care of equipment.

HPER-PEMA-200 Lifeguarding, 2 cr. Lifeguarding is the application of specific skills, knowledge, and techniques to prevent or handle aquatic accidents. The purpose of this course is to teach necessary competencies so an individual exercises every caution to avoid any action or lack of action which can contribute to injury. *Prereq.:* Intermediate Swimming level or Advanced Swimming level.

HPER-PEMA-201 Racquetball, 2 cr. Introduction to basic and advanced skills: serves, kill shots, passing shots, ceiling shots; use of back wall and corners; offensive and defensive strategies; singles, doubles, cutthroat play; tournaments.

HPER-PEMA-203 Weight Training, 2 cr. Basic principles of weight training and its effects on the body; proper lifting and training technique, individualized programs for general fitness or athletics, isometrics, and safety procedures.

HPER-PEMA-204 Weight Training—Variable Resistance Method, 2 cr. Variable resistance of weight training with instruction on structure and function of variable resistance machines. Training principles, safety procedures and techniques applied to individualized basic workout.

HPER-PEMA-205 Hi Intensity Weight Training, 2 cr. The principles of high intensity weight training applied to a program to develop each individual's strength potential. Maximum effort workouts for athletes and/or high level performers.

HPER-PEMA-250 Judo and Self-Defense; Intermediate, 1 cr. Practical application of various intermediate judo and self-defense techniques, mat holds, escapes, and chokes. Continued emphasis on proper training methods, physical conditioning, teaching techniques, and rules and regulations in contests. *Prereq.:* HPER-PEMA-152 or consent of instructor.

HPER-PEMA-252 Folk, Round, and Square Dance, 1 cr. Development of knowledge and skill in folk, national and square dances, experience in square dance calling, and methods of class organization and teaching.

HPER-PEMA-253 Social Dance and Latin American Rhythms, 1 cr. Practice in basic patterns and routines of ballroom dances, developing a finer sense of rhythm, greater adeptness, comprehension, and opportunity to design routines.

HPER-PEMA-265 Intermediate Tennis, 2 cr. Review of the forehand and backhand ground strokes, the flat serve, basic strategy, rules and etiquette. Introduction to intermediate skills such as the volley, the lob, drop shots, passing shots, and the overhead. Additional emphasis on topspin ground strokes, advanced singles and doubles strategies, and tournament play. *Prereq.:* HPER-PEMA-165 or consent of instructor.

HPER-PEMA-271 Track and Field, 1 cr. Theory and practice: terminology and fundamental skills of track and field events and cross-country, techniques of physical conditioning; safety measures.

HPER-PEMA-272 Intermediate Volleyball, 2 cr. Review of basic fundamentals, introduction of intermediate skills and progressions, officiating and tournaments, offensive and defensive strategies. *Prereq.:* HPER-PEMA-173 or consent of instructor.

HPER-PEMA-273 Flag Football, 1 cr. Emphasis on the basic football skills: passing, catching, kicking, blocking. Offensive and defensive strategies. Individual play at all positions, rules, and officiating during games.

HPER-PEMA-276 Soccer, Speedball, and Football, 1 cr. Theory, skill and practice, ball handling, rules, and strategy with application to lead-up games, team play, and tournaments, safety measures.

HPER-PEMA-277 Foundations of Wrestling, 1 cr. History, skills, practice, strategy and safety practice; rules, regulations, contest, tournaments; officiating; scoring.

HPER-PEMA-280 Basic Skin Diving, 1 cr. Introduction of the swimmer to underwater activity through the use of fins, mask, and snorkel. *Prereq.:* HPER-PESV-105 or consent of instructor.

HPER-PEMA-282 Swimming Fitness, 2 cr. To introduce the swimmer to the process of physical conditioning through aquatics. To define and use the different training methods in conditioning swimmers (warm-ups, phases, pacing, fatigue, and staleness). To practice different swim strokes and perfect techniques used in each. To help each swimmer set goals that can realistically be achieved. To make each swimmer safer and more self reliant in and around water. *Prereq.:* HPER-PESV-105 or consent of instructor.

HPER-PEMA-283 Water Aerobics 2 cr. Swimming is one of the best physical activities for people of all ages. Vigorous water activities can make a major contribution to the flexibility, strength, and circulatory endurance of individuals.

HPER-PEMA-292 Intermediate Tumbling, Gymnastics and Trampoline, 1 cr. Theory and practice, advanced skills and progressions, spotting techniques and safety measures; competition, organization of meets, rules and scoring.

HPER-PEMA-293 Movement Education, 2 cr. Introduction to the philosophy, and practice of developing body movement skills through creative movement experiences. Laban oriented movement challenges in rhythms, games, and self-testing activities.

HPER-PEMA-301 Projects in Physical Education, 2 cr. Organization and administration of special physical education projects; athletic days, tournaments, fun-nites, supervisory duties and responsibilities. *Prereq.: consent of instructor.*

HPER-PEMA-341 Foundations of Physical Education for Elementary Schools, 3 cr. Participation in warm-up and day's order activities, low organized and lead up games, tactics. Teaching methods and materials; purchase and care of equipment; safety measures; progressions and skill practice. Program planning in physical education for elementary schools; includes 45 hours of clinical experience. *Prereq.: consent of instructor.*

HPER-PEMA-344 Foundations of Physical Education for Secondary Schools, 3 cr. Basic principles of physical health through participatory activities with special emphasis upon theory, methodology, and materials; participation in warm-up and day's order activities, low-organized and lead-up games, tactics; purchase and care of equipment; program planning in physical education for secondary schools. Includes 90 hours of clinical experience; covers H.B. 150 *Prereq.: consent of instructor.*

HPER-PEMA-350 Judo and Self-Defense: Advanced, 1 cr. Advanced judo and self-defense techniques, their combinations, counters, defenses, and escapes. Learning various stages of the nage-no-kata, and the katame-no-kats. *Prereq.: HPER-PEMA-250 or consent of instructor.*

HPER-PEMA-381 Water Safety Instructor, 2 cr. Work leading to certification by the American Red Cross as a Water Safety Instructor; review of life saving, swimming strokes, diving and stunts; emphasis on practical teaching experiences. *Prereq.: HPER-PEMA-281.*

HPER-PEMA-382 Scuba, 2 cr. Development of knowledge, skills and attitudes necessary to participate safely in water activities using self-contained underwater breathing apparatus. *Prereq.: HPER-PESV-106 or consent of instructor.*

HPER-PEMA-383 Scuba: Open Water, 2 cr. Introduction to open water scuba diving, underwater skills, and safety procedures. *Prereq.: HPER-PEMA-382, and consent of instructor.*

Physical Education Major Theory

HPER-PEMT-141 Fresh Water Fishing for Beginners, 2 cr. The beginning fishing course will provide the students with working knowledge of facts concerning fishing. The primary objective is to transfer the knowledge obtained in the classroom to on-the-water application.

HPER-PEMT-201 Principles and Methods in Physical Education, 3 cr. Principles, methods, aims, and objectives

of physical education; the place of physical education in the school curriculum; general and specific objectives; general techniques in teaching; principles of selecting content; progressions, building curricula to fit varying schools; lesson planning, leadership, and squad organizations; co-operation with teachers, supervisors, and administrators.

HPER-PEMT-202 Tests and Measurements in Physical Education, 3 cr. History of measurement in physical education; selection and evaluation of available measures; statistical techniques commonly used in physical education; construction and uses of tests; administering the testing program; interpretation and application of results.

HPER-PEMT-203 Field Experiences, 3 cr. Field work in health, physical education, or recreation. Preparation of a paper on the nature of the student's work, objectives, and experiences. *Prereq.: consent of instructor.*

HPER-PEMT-205 Nutrition, Weight Control and Exercise, 3 cr. Principles of exercise and nutrition as they apply to fitness and weight control. Special emphasis is directed toward the management of these variables in influencing body composition, lean body weight, growth, and physical performance. A class experiment will help show the effects of behavior modification on weight control. Additional topics will include the effects of aging, sexual differences, and various physical activities on body composition and fitness.

HPER-PEMT-220 Introduction to Adventure Education, 3 cr. The student will learn outdoor skills with practical knowledge, safety, and concern for the environment being the main objective. In addition, the student will develop problem solving and critical thinking skills through a series of physically and mentally challenging tasks.

HPER-PEMT-241 Advanced Techniques and Theories in Fresh Water Fishing, 2 cr. The advanced class will complement and be utilized as an extension of the Fresh Water Fishing for Beginner's course. This course will include lecture/discussions but also classroom demonstration of advanced techniques and theories and how they can be utilized by the student to understand "how to successfully" fish any fresh water lake. *Prereq.: HPER-PEMT-141.*

HPER-PEMT-301 Physical Education Seminar, 2 cr. Discussion of student teacher's problems; conferences and counseling with department staff members; physical education lesson planning and discussions; positive disciplinary control. *Prereq.: consent of instructor.*

HPER-PEMT-302 Kinesiology, 3 cr. Thorough study of the origin, insertion and the function of muscles; types of faulty body mechanics; activities that prevent, counteract or alleviate these conditions; correct sitting and standing positions; posture testing. *Prereq.: six credit hours in general biology. A preparatory course in anatomy/physiology strongly recommended.*

HPER-PEMT-303 Adapted Physical Education and Recreation, 3 cr. Examines the physical education and recreation program for the handicapped and other atypical populations; history, scope, purpose, and development of these programs. Field work and visits to various agencies included in these programs.

HPER-PEMT-304 Athletic Training, 3 cr. Techniques, practices, problems and theories pertaining to athletic conditioning, prevention, treatment and care of athletic injuries. Organization, supervision, and administration of an athletic training program in secondary schools or colleges. *Prereq.: HPER-PEMT-302.*

HPER-PEMT-311 Coaching and Team Management—High School, 3 cr. Administration, theory, and practical study relating to the area of coaching and management of high school teams; scouting and planning; special emphasis given to methodology by means; includes 60 hours of clinical experience.

HPER-PEMT-312 Sport and Society, 3 cr. Course investigates the functions and disfunctions of sport as a social entity. Examines the impact of sport on society and its institutions.

HPER-PEMT-321 Intramurals—High School, 3 cr. Administration, theory, practice, aims, objectives, and methods of intramural programs: students participate in setting up and conducting intramural events; includes 60 hours of clinical experience; covers H.B. 150.

HPER-PEMT-341 Organization of High School Classes, 3 cr. Organizational techniques for the efficient use of physical education facilities with special emphasis upon management and methodology in instruction; attention is given to class control methods, safety, use, storage, and repair of equipment; student participation in various events throughout course; includes 90 hours of clinical experience.

HPER-PEMT-342 Pro-Seminar in Health, Physical Education, and Recreation, 3 cr. Intensive studies in contemporary areas of health, physical education and recreation. *Prereq.: consent of instructor.*

HPER-PEMT-351 Independent Study in Physical Education, 1 cr. Special project of the student's choosing relating to some facet of physical education. *Prereq.: consent of instructor.*

HPER-PEMT-352 Independent Study in Physical Education, 2 cr. (See HPER-PEMT-351 for description.)

HPER-PEMT-353 Independent Study in Physical Education, 3 cr. (See HPER-PEMT 351 for description.)

HPER-PEMT-361 Aerobics and Cardiovascular Fitness, 2 cr. An analysis of the factors and exercises essential to cardio-vascular fitness. Emphasis upon the development of a personal aerobics exercise program.

Physical Education Service

HPER-PESV-104 Beginning Swimming, 1 cr. For non swimmers or beginners; development of skills in elementary strokes, diving and safety.

HPER-PESV-105 Intermediate Swimming, 1 cr. Review of elementary strokes; development of skills in advanced strokes, diving and safety. *Prereq.: HPER-PESV-104 or consent of instructor.*

HPER-PESV-106 Advanced Swimming, 1 cr. Review of elementary and advanced strokes, diving and safety skills;

development of skill in competitive strokes and springboard diving. *Prereq.: HPER-PESV-105 or consent of instructor.*

HPER-PESV-107 Synchronized Swimming, 1 cr. Designed for advanced swimmers with emphasis on stunts, rhythmic swimming and choreography. *Prereq.: HPER-PESV-105 or proficiency.*

HPER-PESV-127 Latin-American Dance, 1 cr. Latin-American dance skills; choreographic development of dance routines; historical and cultural aspects of Latin-American social dances.

HUMAN RESOURCE DEVELOPMENT

James Lockwood, Ph.D., Professor, Coordinator
James McCampbell, M.A., Internship Coordinator

The Human Resource Development (HRD) Program offers courses of study leading to both undergraduate and graduate degrees in Human Resource Development, as well as to a minor in Human Resource Development, to prepare professionals who will be responsible for the training, education, and development of adults in settings such as business, industry, health care, social service, museums, zoos, prisons, and federal, state and local government. Students in the program will be provided opportunities to develop the knowledge and competencies necessary to meet the increasing needs that organizations have for educators/trainers. Competencies that have been identified by professional organizations have been carefully considered in the development of specific objectives for the course work in the program.

The Human Resource Development Program is housed in the Department of Educational Foundations. Please refer to the Educational Foundations section of this catalog.

UNDERGRADUATE PROGRAMS

Major in Human Resource Development for the Bachelor of Arts Degree

Upon completion of the major, students will demonstrate: 1) knowledge of different organizational settings in which teaching and learning occur; 2) knowledge of the educational needs of organizations; 3) skills in task analysis, program planning, and program design that are in keeping with organizational needs; 4) ability to apply principles of learning and motivation as a basis for decisions regarding instructional programs for adults; 5) sensitivity to the psychological and cultural needs of diverse populations needed for adaptation of training/educational planning; and 6) competency in the use of methods and technology appropriate for the instructional/learning needs of organizations.

Required Courses:

HRD-300 Principles and Practices in Human Resource Development.....3 cr.
HRD-301 Adult Teaching/Learning Process.....3 cr.

HRD-310 Instructional Techniques and Technology	3 cr.
HRD-315 Computer Utilization in Human Resource Development.....	3 cr.
HRD-320 Dynamics of Working with Groups and Individuals	3 cr.
HRD-321 Designing Instruction in Human Resource Development.....	3 cr.
HRD-329 Internship and Seminar in Human Resource Development.....	9 cr.
Human Resource Development Electives	6 cr.

Each student, in consultation with the program coordinator and/or advisor, will select 6 additional credit hours of work. The selection of courses will be guided by the student's career objectives and will focus on competencies relevant to these objectives. The electives will amplify and extend the core courses.

Total 33 cr.

Human Resource Development majors must be fully admitted to the College of Education prior to registering for HRD-329 Internship and Seminar in Human Resource Development.

Additional Area of Concentration18-33 cr.

Students will complete either a second major or a minor in a related area such as business, communications, criminal justice, information science, instructional media, psychology, recreation, or social work.

Additional Electives

Students with weaknesses in any area such as communication skills will be required to select electives with the goal of developing these skills.

Minor in Human Resource Development (18 cr. hrs.)

The Minor in Human Resource Development allows students to combine their interests in psychology, business, communications, social services, education, political science, or technical training with the study of the field of Training/Human Resource Development and the development of skills important for practitioners in Human Resource Development.

Required Courses:

HRD-300 Principles and Practices in Human Resource Development.....	3 cr.
HRD-301 Adult Teaching/Learning Process	3 cr.
HRD-310 Instructional Techniques and Technology	3 cr.
HRD-320 Dynamics of Working with Groups and Individuals	3 cr.
Electives	6 cr.
Courses such as HRD-315, HRD-321, and HRD-362 may be selected as well as other courses with the approval of the Human Resource Development advisor.	
Total	18 cr.

GRADUATE PROGRAM

Master of Arts in Human Resource Development

This Master's program prepares professionals who will be responsible for the training, education, and development of adults in organizations involved in business, health care, human service, and government. The program has been developed especially for Human Resource Development practitioners desiring formal training and experienced employees wishing to move into the Human Resource Development field.

The program is designed to develop student's ability to: 1) assess the nature of performance problems; 2) assess the relevant characteristics of learners/trainees; 3) apply needs and task/content analysis techniques; 4) design training/education/development programs; 5) determine the effectiveness of training/education/development programs; 6) communicate and interact effectively with groups and individuals; and 7) administer human resource development projects and programs.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

1. B.A. degree in Human Resource Development or demonstrated success in Human Resource Development, teaching, or related work experience.
2. Two letters of recommendation from professors, employers, or supervisors which provide evidence of an applicant's qualifications.

Individuals who fail to satisfy requirements under number 1 will be asked to complete undergraduate course work in Human Resource Development prior to admission. The courses to be taken will be determined by the program advisor and will be based on a review of the individual's academic record and work experience.

Requirements for the Degree:

Required Courses:

HRD-401 The Adult Learner I	3 cr.
HRD-405 Needs and Task Analysis in HRD	3 cr.
HRD-406 Instructional Design in HRD I	3 cr.
HRD-407 Measurement and Evaluation in HRD	3 cr.
HRD-410 Administration of HRD Programs.....	3 cr.
EDFN-413 Human Relations and Leadership.....	3 cr.
HRD-415 Seminar in HRD	3 cr.
HRD-416 Practicum in HRD I	3 cr.

Electives (including optional Practicum in HRD II and/or thesis if applicable)12 cr.
The twelve hours of electives must be approved by the HRD graduate advisor.

Total 36 cr.

NOTE: For all students in the program, the following will be required:

- a. A total of 36 credit hours of study, of which at least 30 must be 400-level courses.
- b. Two comprehensive papers.
- c. The completion of a final oral presentation/examination.

Thesis Option

A thesis option will be available by invitation only. The invitation will be based on a consensus agreement of the program's policy board and the desire of the student to select the thesis option. Students doing a thesis will complete HRD-420 Thesis Seminar, for 3 credit hours.

COURSE OFFERINGS

HRD-202 Career and Life Planning I, 3 cr. Designed to help students develop a greater understanding of themselves and to identify a satisfying career field that matches their talents and abilities. Students will identify their values, analyze their skills, discover their likes and dislikes, and focus on their interests as they relate to possible career choices. A long range plan will be developed and a supportive resume describing capabilities and experience will be prepared.

HRD-300 Principles and Practices in Human Resource Development, 3 cr. Course enables students to explore their aptitudes and interests in relation to the roles of educators in non-school settings and to familiarize themselves with the overall purposes of organizations and the role of educators within such organizations. *Prereq.: junior standing or consent of instructor.*

HRD-301 Adult Training/Learning Process, 3 cr. The study of the range and types of desired educational outcomes as related to characteristics of adult learners, and principles of learning and instruction. *Prereq.: junior standing.*

HRD-310 Instructional Techniques and Technology, 3 cr. The study of the instructional techniques and technology appropriate for use in the training of personnel in business, health care, industry, and social service organizations. An emphasis will be placed on techniques that incorporate the use of media and are appropriate for use in training adults. *Prereq.: junior standing.*

HRD-312 Human Resource Development: Title Varies, 2 cr. Designed to treat various topics in greater detail than presently covered in existing 300-level HRD courses. Courses will focus on the development of a specific knowledge base and/or skills that students will display their competence in. *Prereq.: junior standing.*

HRD-313 Human Resource Development: Title Varies, 3 cr. Designed to treat various topics in greater detail than presently covered in existing 300-level HRD courses. Courses will focus on the development of a specific knowledge base and/or skills that students will display their competence in. *Prereq.: junior standing.*

HRD-315 Computer Utilization in Human Resource Development, 3 cr. An introduction to the use of computers in educational and training programs. Topics include the

role of computers in education, history of computers, introduction to computer components, computer assisted learning, computer managed learning, computer based training, overview of programming languages and packaged programs, and use in research. *Prereq.: junior standing or consent of instructor.*

HRD-320 Dynamics of Working with Groups and Individuals, 3 cr. The study of effective interpersonal and group behavior in organizations. Understanding the importance of such behaviors for the achievement of learning outcomes and the development of skill in the use of such behaviors will be emphasized. *Prereq.: junior standing.*

HRD-321 Designing Instruction in Human Resource Development, 3 cr. Application of major principles relating to the design and presentation of training/education programs for adults. Students will demonstrate their level of competency on major tasks and then focus efforts on improving levels of competency. The course is to be taken the term prior to the students' participation in the internship program. *Prereq.: HRD-310.*

HRD-323 Independent Study in Human Resource Development, 3 cr. In-depth study of special areas in human resource development. *Prereq.: completion of at least one HRD course.*

HRD-325 Communication in Human Resource Development, 3 cr. This course will explore the role of communication skills in the Human Resource Development field, concentrating on written and oral presentation skills. Topics covered include audience analysis, topic selection, research techniques, interviewing/questioning, organization/outlining, and active listening. *Prereq.: junior standing.*

HRD-329 Internship and Seminar in Human Resource Development, 9 cr. The internship and seminar will be the culminating activity for the Human Resource Development major. Internship will be in health care settings, business and industry, community, state and federal agencies, rehabilitation and recreation centers, and professional associations. The purpose will be to synthesize what the student has learned in the classroom with practice in the field. *Prereq.: completion of core courses.*

HRD-362 Instructional Media in Human Resource Development, 3 cr. The purpose of the course is to provide the student with a practical, hands-on approach to selecting and utilizing instructional media, consistent with theories and practices in instructional technology. The emphasis will be placed upon the tools (i.e., equipment and materials) which an instructional designer has available for the production of instructional materials. Students will learn how to operate equipment and will produce instructional materials for media programs.

HRD-390 Computer Based Training, 3 cr. Systematic approach to the design and use of computer-based and interactive video instructional materials. Course includes courseware development, implementation, training techniques, documentation, and state-of-the-art technology. *Prereq.: HRD-315 or consent of the instructor.*

HRD-401 The Adult Learner I, 3 cr. An analysis of adult learning theory and research in relation to practice in the

field of training and human resource development, including study of how adults acquire and use knowledge, skills, and attitudes. Application of theory in varied adult learning situations will be emphasized. **Prereq.:** graduate standing and HRD-300 or consent of instructor.

HRD-402 Adult Learner II, 3 cr. In depth focus on individual difference characteristics of adults that affect learning. Consideration of such characteristics as motivation, learning styles, perception of self and others, culture, experiential background, memory/information processing, attribution, cognitive structures, and metacognition. Research paper required that includes application to HRD field. **Prereq.:** HRD-401.

HRD-405 Needs and Task Analysis in Human Resource Development, 3 cr. Defining gaps between desired and actual performance and specifying the cause of the gaps. Identifying and analyzing tasks and job content for the purpose of developing training designed to accomplish specific results in a job or organization. The design, development, and application of techniques and instruments to use in obtaining information on needs and tasks. **Prereq.:** graduate standing and HRD-300 or consent of instructor.

HRD-406 Instructional Design in Human Resource Development I, 3 cr. The process of preparing objectives, defining content, selecting and sequencing learning activities for specific training/education/development programs. Includes selection of methodology, including use of media and computer technology, critique and redesign of off-the-shelf materials, and evaluation. **Prereq.:** graduate standing and HRD-405.

HRD-407 Measurement and Evaluation in Human Resource Development, 3 cr. Determining the effectiveness of T/HRD learning programs and services. Making decisions on how, what, and when to measure and what standards to use in evaluation. The design, development, and application of techniques and instruments to use in obtaining measurement data. Cost/benefit analysis of the impact of T/HRD on the organization. **Prereq.:** graduate standing and HRD-406.

HRD-408 Instructional Design in Human Resource Development II, 3 cr. Study of advanced instructional design techniques and the theoretical basis for the implementation of these techniques. An emphasis will be placed on researching, designing, presenting and evaluating instructional products. **Prereq.:** HRD-406.

HRD-409 Television Production in Human Resource Development, 3 cr. This course will explore techniques of television production and utilization as they apply to the field of human resource development. Students will learn the principles of camera operation, lighting, composition, video and audio recording, video editing, field production, directing and scripting. The approach will be hands-on; students will write and produce video training materials using instructional design principles. **Prereq.:** graduate standing and HRD 406.

HRD-410 Administration of Human Resource Development Programs, 3 cr. Development and monitoring of Training and Human Resource Development programs that are consistent with the organization's present and future needs. Preparation of long-range plans for the T/HRD function in an organization and articulation of viewpoints and

services to management. Study of how successful T/HRD practices work in selected organizations. **Prereq.:** graduate standing and HRD-300 or consent of instructor.

HRD-411 Consulting in Human Resource Development, 3 cr. Role of the HRD consultant both internal and external within an organization analyzing and training needs and/or other intervention strategies. Topics covered include client-consultant relationships, organizational assessment, and proposal writing. **Prereq.:** graduate standing; six graduate hours in HRD and consent of instructor.

HRD-412 Project Management in Human Resource Development, 3 cr. Study of the principles of project management as they relate to the development of HRD programs. Application of the principles to HRD projects that are both in the planning state and in progress will be emphasized. **Prereq.:** HRD-407.

HRD-413 Independent Study in Human Resource Development, 3 cr. In-depth study of special areas in human resource development. **Prereq.:** graduate standing, consent of instructor and six hours of graduate study in human resource development.

HRD-415 Seminar in Human Resource Development, 3 cr. The seminar will be taken concurrently with Practicum in Human Resource Development I. The objective is to synthesize what has been learned in the classes and apply this learning to on-site problems for which the students are asked to develop training solutions. **Prereq.:** master's degree candidacy in Human Resource Development, HRD-401, HRD-407, and written consent of program advisor.

HRD-416 Practicum in Human Resource Development I, 3 cr. Students will do a supervised practicum either in the organization in which they are presently working or in an appropriate site approved by program faculty. While participating in the practicum, the students will be involved in a specified sequence of HRD activities that will include participation in the design and presentation of a training program.

Prereq.: master's degree candidacy in Human Resource Development, HRD-401, HRD-407, and written consent of program advisor.

HRD-417 Practicum in Human Resource Development II, 3 cr. See description of Practicum in HRD I. Students have the option of taking additional practicum hours if the field setting provides an opportunity to design and present a training program that is more involved and will require an extended time commitment. Practicum in HRD I and Practicum in HRD II can be taken during the same term if it can be clearly established that the student will have time for an extended commitment. **Prereq.:** master's degree candidacy in Human Resource Development, HRD-401, HRD-407, and written consent of program advisor.

HRD-418 Topical Seminar in Human Resource Development, 3 cr. Advanced study and application of the concepts and principles that are the basis for specific areas in the Human Resource Development field. Consult the Schedule of Classes for specific topics. **Prereq.:** graduate standing; six hours of graduate studies in HRD.

HRD-419 Project in Human Resource Development, 3 cr. Students prepare a project that involves the application and/or extension of the knowledge and skills developed in the courses that they have completed. The project may be in

the form of an instructional program or a paper on a specific aspect of Human Resource Development. The project will be a focus for the student's final oral presentation. **Prereq.:** Master's degree candidacy in Human Resource Development and approval of advisor.

HRD-420 Thesis Seminar in Human Resource Development, 3 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements of the program, Master of Arts in Human Resource Development.

Prereq.: master's degree candidacy in Human Resource Development and invitation by program advisor.

INNER CITY STUDIES EDUCATION

Donn F. Bailey, Ph.D., Professor

Jacob H. Carruthers, Ph.D., Professor

Gloria Peace, Ph.D., Professor

Elkin Sithole, Ph.D., Professor

William E. Smith, Ph.D., Associate Professor

Robert T. Starks, M.A., Associate Professor

Anderson Thompson, Ph.D., Associate Professor

Anncelyne Whitaker, M.S.W., Associate Professor

Conrad W. Worrill, Ph.D., Professor, Chairperson

The Department of Inner City Studies Education is located in the Center for Inner City Studies, 700 E. Oakwood Blvd., 60653. The curricula in Inner City Studies Education focus on the interdisciplinary approach to examining the political, economic, social, and cultural forces that impact on inner city communities in this country and throughout the world. The Department has established, as its primary function, the retraining of inner city career persons who are prepared to work in the inner city communities.

The Department of Inner City Studies Education, through the College of Education, offers the following degrees:

Bachelor of Arts in Inner City Studies

Master of Arts in Inner City Studies

In addition, the department offers a Minor in Inner City Careers and a Minor in Mexican/Caribbean Studies.

UNDERGRADUATE PROGRAMS

Major in Inner City Studies for the Bachelor of Arts Degree

Required Courses:

ICSE-103	Introduction to Inner City Studies.....	3 cr.
ICSE-201	History and Culture of Ethnic Groups in America	3 cr.
ICSE-301	Racism in Theory and Fact	3 cr.
ICSE-302	The Inner City Community	3 cr.
ICSE-303	Theory and Methodology in Ethnic Group Research	3 cr.

ICSE-304	Communication in the Inner City.....	3 cr.
Electives		12 cr.
Electives are chosen in consultation with an advisor, from undergraduate course offerings in Inner City Studies Education.		

Total 30 cr.

Inner City Studies Education majors must be fully admitted to the College of Education by the time they have completed 24 hours. The final six hours of the major may not be taken until the student has been admitted to the College of Education.

Minor in Inner City Careers (18 cr. hrs.)

The department encourages students in the Inner City Studies major to pursue a minor in Inner City Careers. Through established contacts with other educational institutions, business enterprises, and social and government agencies, students are made aware of changing career opportunities and demands in city environments.

Required Courses:

ICSE-305	Business, Welfare and Labor System	3 cr.
ICSE-329A	Pro-Seminar in Inner City Studies	3 cr.
ICSE-332A	Inner City Careers	1 cr.
ICSE-334A	Inner City Careers	3 cr.

Electives

Electives may be fulfilled through internships and life-experience credits directly related to your chosen career.

Check with your advisor.

Total 18 cr.

NOTE: ICSE-305 and 329 may not be used to fulfill requirements for other major or minor programs.

Minor in Mexican/Caribbean Studies (18 cr. hrs.)

The Mexican/Caribbean Studies Minor is an interdisciplinary program designed to help students:

1. understand the role played by the Mexican/Caribbean peoples in the modern world;
2. appreciate the similarities and diversities among various Mexican/Caribbean peoples;
3. understand the socio-political and economic conditions under which Mexican/Caribbean peoples live;
4. develop knowledge and appreciation of the language and literature of the Mexican/Caribbean peoples; and
5. become familiar with careers that could potentially serve the needs and interests of Mexican/Caribbean peoples.

Required Courses:

ICSE-201	History and Culture of Ethnic Groups in America	3 cr.
Electives		15 cr.
Electives are chosen from a list of selected courses in sixteen		

academic departments. Of the fifteen credit hours, nine must demonstrate thematic consistency. A minimum of nine credit hours must be at the 300-level. Courses must be distributed among three or more different disciplines or departments. Electives must be chosen with the consent of the program advisor.

Additional Offerings

In addition, the department offers, at its site, courses for those Inner City Studies undergraduate majors who desire to take the Elementary Education major leading to elementary teacher certification.

Furthermore, the department works closely with the Center for Inner City Studies (CICS) staff in offering courses necessary to complete the University General Education requirements.

Courses leading to a second major in Business and Management are also available at the CICS site. (Please consult the College of Business and Management section of this catalog for a complete description of this program.)

Community Affairs

The department sponsors a variety of courses, workshops, and community activities for Northeastern students and for members of the inner city community. One program of special interest in the **African and Caribbean Studies Program** which is a comparative education program that focuses on inner city and institutional development and includes study tours and workshops.

GRADUATE PROGRAM

Master of Arts in Inner City Studies

This program is designed for students who intend to work in the variety of positions available in the human service and related fields. A master's project or paper is required.

Requirements for the Degree:

Core curriculum: (required of all students)

ICSE-411 Graduate Study in the Inner City.....	3 cr.
ICSE-427 Seminar in the Inner City Community.....	3 cr.
ICSE-442 Research Methods in Inner City Studies.....	3 cr.
ICSE-443 Research Writing.....	3 cr.
ICSE-452 Field Internship.....	3 cr.
ICSE-453 Seminar in Field Internship.....	3 cr.
Approved Electives.....	12 cr.
Total	30 cr.

COURSE OFFERINGS

ICSE-101 Development of Inner City Children, 3 cr.

An examination of traditional theories of child growth and development in the light of recent findings of interdisciplinary research on the behavior of disadvantaged children in urban

settings. Special emphasis on inner city family structures as well as those informal and formal systems that contribute to personality formation.

ICSE-102 The Paraprofessional in the Inner City School, 3 cr. Introduction to educational philosophies and teaching techniques relevant to inner city schools from pre-school through upper elementary grades as they pertain to the paraprofessional (teacher aide). Considerable focus on teacher aide-pupil relationships and teacher aide-parent relationships. Special projects will deal with practical classroom situations and motivational techniques. Students will be exposed to new materials and media and trained to select those especially applicable to inner city youth.

ICSE-103 Introduction to Inner City Studies, 3 cr. An overview of the problems of minority groups in large urban settings. Includes the study of mental and physical health, and community services.

ICSE-104 Introduction to Ethno-Musicology, 3 cr. An introduction to the music of each Ethnic group: Spanish descent, Afro-American, Indian-with historical analysis of each group's musical origins.

ICSE-105 Urban Art Forms, 3 cr. Survey of contemporary art forms that compares themes, types of materials, and designs with those of the past.

ICSE-106 Inner City Behavior Patterns, 3 cr. A psychological approach to the distinctive life-style patterns that permeate all facets of inner city living.

ICSE-201 History and Culture of Ethnic Groups in America, 3 cr. An examination of religious, social, economic, and political aspects of ethnic groups in the United States, namely: Spanish descent, Afro-Americans, American Indians, etc.

ICSE-202 Colonial Systems, 3 cr. The history, culture, politics and economics of external and internal colonialism from the 17th century to the present. Restricted to undergraduates.

ICSE-203 Revolutionary Movements, 3 cr. Comparative study of various contemporary revolutionary movements including domestic revolts.

ICSE-204 Introduction to African Civilizations, 3 cr. An introductory survey of African civilizations, concerned with the major culture of Africa before the invasions by the modern, Western European nations of the 15th and 16th centuries.

ICSE-205 Ethnic Politics in America, 3 cr. A study of the way various ethnic and social groups relate to local and national politics. Examination of the various ways by which ethnic groups in America have obtained political strength. It will investigate ethnic activities in this area on the local and national levels.

ICSE-301 Racism in Theory and Fact, 3 cr. Study of race and culture as related to social and racist theories. Focus will be on such issues as prejudice, racial superiority, and racial group interaction.

ICSE-302 The Inner City Community, 3 cr. The study of the politics, economics, and social structure of the inner city. In addition, the ecological approach will be covered.

ICSE-303 Theories and Methodology in Ethnic Group Research, 3 cr. Examination of literature and theories that relate to research on minority communities and individuals. Examination of the various theoretical frameworks and models that have been developed from research of various ethnic groups. An examination of the methods used in collecting such data will also be undertaken.

ICSE-304 Communication in the Inner City, 3 cr. An examination of the cultural barriers and racial myths which impede inter-cultural communication. Development of a theory of inter-cultural communication with emphasis on means of disseminating ideas, news and propaganda in inner city communities.

ICSE-305 Business Welfare and Labor Systems in America, 3 cr. A study of political, economic, and social aspects of the labor welfare economy as related to group structure. Problems posed by automation, cybernation, and discrimination will be studied in-depth.

ICSE-324 Problems in Testing Inner-City Children, 3 cr. Special problems in administering, interpreting, and constructing tests for inner city children.

ICSE-326 Language Behavior in Inner-City Communities, 3 cr. Review of the literature and research on language problems in the inner city, methods, and programs for speech, reading, and listening improvement, and utilization of learning aids.

ICSE-327 Seminar in Administrative Practicum, 2 cr. Designed to provide orientation, overview and evaluation of practicum experience. Must be taken concurrently with ICSE-328. *Prereq.: ICSE-305.*

ICSE-328 Administrative Practicum, 4 cr. A ten week assignment in an inner city administrative unit, governmental or private. Designed to give the student experience in administration and administrative problems of various agencies and organizations. The student will be supervised by a cooperating administrator working with the faculty practicum supervisor. Must be taken concurrently with ICSE-327. *Prereq.: ICSE-305.*

ICSE-329 Pro-Seminar in Inner City Studies, 3 cr. Designed to permit in-depth probes into a variety of issues concerning various inner city communities, especially those in North and South America, The Caribbean, and Africa. May be comparative. Can be taken more than once for credit.

ICSE-331 Literature of Ethnic Groups, 3 cr. Approach to the study of ethnic cultures through literature written by and about those groups; study of literary works concerned with Black, Southern Mountain Whites, American Indians, Cubans, Puerto Ricans, and Mexicans. insights into the cultural attributes of these groups through the reading of novels, plays, biographies, essays, poems, and short stories.

ICSE-332 Inner City Careers, 1 cr. Enables students to explore information about themselves and the world of work in an effort to make personal career decisions. Emphasizes the communications process in the work world.

ICSE-333 Inner City Careers, 2 cr. Enables students to survey career areas being considered as their life's work.

Students are exposed to career conditions, requirements, income ranges, etc. of the careers under consideration. Emphasis is placed on compiling data through student research, about people functioning in career areas, and potential employers. Students also explore processes of seeking specific employment positions. *Prereq.: admission to College of Education with a major in inner city studies.*

ICSE-334 Inner City Careers, 3 cr. Students are required to serve as "workers" (usually time without pay) in the career areas of their choice. In addition, the course requires considerable thought on students' part and a written prospectus of how they would use their chosen career to benefit inner city communities if given the opportunity. *Prereq.: admission to College of Education with a major in inner city studies.*

ICSE-348 Intergroup Dynamics, 3 cr. Study of how to help pupils and parents of different races interact harmoniously; practice in directing activities that will enhance intercultural relationships through such techniques as role playing, panel discussions, and public speaking.

ICSE-411 Graduate Study in the Inner City, 3 cr. An introduction to graduate study of the conflict of cultures in the United States, especially between the dominant culture and Afro-Americans, American Indians, Southern Mountain Whites, Cubans, Mexicans, and Puerto Ricans. Special emphasis will be given to educational problems facing these groups. This course is required and should be taken early in the student's program. *Prereq.: graduate standing.*

ICSE-412 Behavior Patterns in the Inner City, 3 cr. The study of inner city behavior patterns which result in agency intervention. *Prereq.: graduate standing.*

ICSE-413 The Idioms of Afro-American Communities, 3 cr. The oral communication characteristics and language patterns peculiar to Afro-Americans in urban areas. *Prereq.: graduate standing.*

ICSE-414 History and Culture of Southern White Migrants, 3 cr. History of the Southern White Migrants, treated in conjunction with an examination of the cultural patterns of the people; major emphasis on the family, religion, education, and economic status, and their respective roles in the transition from a rural to an urban way of life. *Prereq.: graduate standing.*

ICSE-415 History and Culture of Spanish Speaking Americans: Mexican, Puerto Rican, and Cuban, 3 cr. Cultures of the Puerto Rican, Mexican, and Cuban, studied against their historical backgrounds; special attention given to an understanding of the individual's problems in transition from peasant to urban societies. *Prereq.: graduate standing.*

ICSE-416 History and Culture of Afro-Americans, 3 cr. Study of African derivation and the culture of American slavery; urban and rural existence; development of the emergent Afro-American middle-class. *Prereq.: graduate standing.*

ICSE-417 History and Culture of American Indians, 3 cr. Treatment of the general history and distribution by cultural areas of the North American Indian; description and analysis of representative Indian values undertaken in order to understand the problems in the process of change from tribal to non-tribal systems. *Prereq.: graduate standing.*

ICSE-425 Seminar in Religion and Philosophy of Traditional Communities, 3 cr. Seminar with varying subtitles designed for students to focus on the religion, beliefs and wisdom of selected ethnic societies, especially African, Caribbean, and American Indian. The impact of Western dominion on these religions and philosophical systems will be examined. May be taken more than once for credit. *Prereq.:* graduate standing, ICSE-411, ICSE-442 and ICSE-427.

ICSE-426 History and Philosophy of Black Education, 3 cr. Examination of the historical and social forces surrounding the issues of Black education in America, from 1800 to the present. It is within the scope of this course to help the student recount and reconstruct, as near as possible, the crucial social controversies, their advocates, and the century-old evolution of schools of thought on Black educational theory. *Prereq.:* graduate standing, ICSE-411, ICSE-427 and ICSE-442.

ICSE-427 Seminar in Inner City Studies, 3 cr. Advanced analysis of the inner city which allows faculty to develop, with students, courses that reflect the changing dynamic nature of the inner city. May be taken more than once for credit provided titles are varied. *Prereq.:* graduate standing, ICSE-411 and ICSE-442.

ICSE-431 Seminar in Inner City School Problems, 3 cr. Problems of curriculum, counseling, instruction, facilities, school attendance, the gang, etc.; students to do research and present papers on special problem areas and their relationship to school and community. The student will complete a master's report, emphasizing participation in some activity related to inner city education, with approval of instructor. The report may take the form of demonstrations, copies of interviews, a written report, etc. *Prereq.:* acceptance to master's degree candidacy in inner city studies.

ICSE-432 Curriculum Development in the Inner City, 3 cr. A consideration of the life needs, the assets and the disabilities of the inner city child, and the adjustment of the curriculum to improve the child's learning experiences. Emphasis will be placed on the theory of curriculum construction and the needs of inner city children. *Prereq.:* graduate standing and ICSE-411.

ICSE-441 Cultures of the Inner City, 3 cr. Intensive comparative analysis of the way of life of America's urban poor and their relationship to the larger society. *Prereq.:* graduate standing and ICSE-411.

ICSE-442 Research Methods in Inner-City Studies, 3 cr. Research design and analysis of data; methods for collecting and interpreting data, observation, formulation of hypotheses, techniques of interviewing, questionnaire construction, and writing of reports; primary objective of the course is to train students to read research studies with understanding and to apply the findings to classroom instruction. *Prereq.:* graduate standing.

ICSE-443 Research Writing, 3 cr. Advanced instruction in writing reports, proposals, papers, and thesis. Consideration of form and style. Methods of writing critiques of research studies. *Prereq.:* graduate standing, ICSE-411 and ICSE-442.

ICSE-444 Methods of Teaching in the Inner City, 3 cr. Curriculum development and adjustment to meet needs

of inner city pupils; new approaches to teaching the "hard to reach" pupil; students to develop units in their own major teaching areas, utilizing new materials and techniques. *Prereq.:* graduate standing.

ICSE-445 Independent Study in Inner City Studies, 3 cr. Intensive study of topics related to student's program. *Prereq.:* graduate standing.

ICSE-451 Research and Thesis, 3 cr. Supervision and advisement in evolving thesis problems and in writing the thesis. *Prereq.:* master's degree candidacy in inner city studies.

ICSE-452 Field Internship, 3 cr. An opportunity to work with disadvantaged children in varied social agencies that serve these youngsters in their communities; the student to function as participant-observer by assuming an active work role in the various programs offered by the agencies, thereby allowing close, intimate contact with the children and their parents; agency staff supervision, as well as regular attendance at staff conferences, to enable the student to gain working insight and understanding of the philosophy of the agency program; to be taken concurrently with ICSE-453. *Prereq.:* master's degree candidacy in inner city studies.

ICSE-453 Seminar in Field Internship, 3 cr. A companion course to field internship; formulation of operational principles of understanding and working through various problems that arise in the student's interaction with disadvantaged youngsters in the field; clarification of the student's attitudes and feelings as determinants in the relationships and learning processes; to be taken concurrently with ICSE-452. *Prereq.:* master's degree candidacy in inner city studies.

ICSE-454 Masters Project Research, 3 cr. Supervision and advisement in evolving a research project and in writing research results. *Prereq.:* master's degree candidacy in inner city studies.

INSTRUCTIONAL MEDIA

Christine Swarm, Ed.D., Professor, Coordinator
(See listing of faculty in the Department of Curriculum and Instruction section of this catalog.)

The Instructional Media Program, which is housed in the Department of Curriculum and Instruction, is an integrated print-non-print program which encompasses topics traditionally grouped under library science and audio-visual education headings. It is designed to prepare media specialists such as: school librarians, audio-visual coordinators and instructional media specialists for today's schools. In addition, the program is designed to assist pre-service and in-service teachers in selecting, producing, utilizing and evaluating instructional media to meet specific behavioral objectives.

Students completing the program are expected to: 1) demonstrate a knowledge of bibliographic database courses and basic reference sources; 2) demonstrate a knowledge of selection and evaluation procedures including technologies related to a wide variety of print and nonprint media; 3) demonstrate a knowledge of organizational procedures involved in setting up a school library media center; 4) demon-

strate an ability to assist teachers in selecting teaching and learning resources; 5) demonstrate a knowledge for organization through a system of cataloging, classification, and indexing to provide accessibility for the user; and 6) demonstrate proficiency using the microcomputer and awareness of its impact on curriculum development.

Undergraduate students who complete the minor in Instructional Media outlined below and who qualify for city and/or state teacher certification (elementary level), will also qualify for a State of Illinois Endorsement for School Libraries (to be applied to a valid Elementary certificate).

Both an undergraduate minor and a master's degree are offered in instructional media.

UNDERGRADUATE PROGRAM

Minor in Instructional Media (18 cr. hrs.)

Required Courses:

C&I-INMD-251	Introduction to Media Utilization or	
C&I-INMD-351	Selection, Utilization and	
	Evaluation of Instructional Materials	3 cr.
C&I-INMD-331	Functions of the School	
	Library	3 cr.
C&I-INMD-332	Technical Processes in School	
	Libraries	3 cr.

Electives

Choose three of the following:	9 cr.
C&I-INMD-316 Computer Utilization in Education	3 cr.
C&I-INMD-333 Library Materials for Language and Creative Arts	3 cr.
C&I-INMD-334 Library Materials for Social Science and Natural Science	3 cr.
C&I-INMD-335 Reading Guidance in Elementary School	3 cr.
C&I-INMD-352 Design and Production of Instructional Materials	3 cr.
Total	18 cr.

GRADUATE PROGRAM

Master of Arts in Instructional Media

Requirements for Admission to the Program:

In addition to the requirements of the Graduate College for admission, applicants electing this program must have completed the following or their equivalents:

C&I-INMD-331	Functions of the School Library	
C&I-INMD-332	Technical Processes in School Libraries	
C&I-INMD-351	Selection, Utilization and Evaluation of	
	Instructional Materials	
	and one of the following:	
C&I-INMD-333	Library Materials for Language and	
	Creative Arts	

C&I-INMD-334 Library Materials for Social Science and Natural Science
C&I-INMD-335 Reading Guidance in the Elementary School

Required Courses:

C&I-INMD-404	Administration of Instructional	
	Media Programs	3 cr.
C&I-INMD-408	The School Media Program	3 cr.
C&I-INMD-417	Microcomputer Applications	
	for School Libraries	3 cr.
C&I-INMD-436	Introduction to Library	
	Science Reference Methods	3 cr.
C&I-INMD-498	Directed Field Experience:	
	Practicum in Instructional Media	3 cr.
	One of the following:	3 cr.
C&I-INMD-407	Media Selection for Children	
	and Young Adults	3 cr.
C&I-INMD-416	Library of Congress	
	Classification	3 cr.

One of the following:	3 cr.
C&I-INMD-316 Micro-Computer Programming for Teachers	3 cr.
C&I-INMD-401 Theory of Programmed Instruction	3 cr.
C&I-INMD-403 Television in Today's World	3 cr.
C&I-INMD-405 Advanced Design and Production of Instructional Materials	3 cr.
C&I-INMD-406 Advanced Studies in Technical Processes	3 cr.
C&I-INMD-452 Advanced Seminar in Children/ Young Adult Literature	3 cr.
C&I-INMD-467 Specific Computer Applications for School Media Centers	3 cr.

Electives: 12 cr.
Total 33 cr.

In addition, requirements for the degree include two comprehensive papers or a thesis and a final comprehensive examination taken in the term following the completion of all Instructional Media course work required for the degree. This examination may be written, oral or a combination of both.

NOTE: If the thesis option is selected (by departmental invitation), C&I-INMD-499 Thesis Seminar may be taken for three hours of credit.

COURSE OFFERINGS

C&I-INMD-116 Microcomputer Literacy for Educators, 3 cr. An introduction to the role, use and operation of the microcomputer in instructional settings. Topics include: the advantages and limitations of the microcomputer in the teaching/learning process, the operation of the microcomputer, and software available for use in educational settings.

C&I-INMD-251 Introduction to Media Utilization, 3 cr. Explores various utilization techniques involving the use

of and operation of projection and audio equipment for instructional purposes.

C&I-INMD-316 Computer Utilization in Education, 3 cr. An introduction to the use of computers in educational and training programs. Topics include: role of computers in education, history of computers, introduction to computer components, computer assisted learning, computer managed learning, overview of programming languages and packaged programs.

C&I-INMD-331 Functions of the School Library, 3 cr. The school library, its origins, development, and administration, as seen in the context of the history of libraries in general.

C&I-INMD-332 Technical Processes in School Libraries, 3 cr. Principles and objectives of organizing library materials; classifications and cataloging procedures, with emphasis on the school library. *Prereq.: CUI-INMD-331.*

C&I-INMD-333 Library Materials for Language and Creative Arts, 3 cr. Critical examination and evaluation of basic reference tools; encyclopedias, bibliographies, dictionaries, directories, and other print and non-print materials. *Prereq.: CUI-INMD-331.*

C&I-INMD-334 Library Materials for Social Science and Natural Science, 3 cr. (See C&I-INMD-333 for description.)

C&I-INMD-335 Reading Guidance in the Elementary School, 3 cr. Evaluation and use of library materials and techniques for the guiding of reading in kindergarten through grade eight. *Prereq.: C&I-INMD-331.*

C&I-INMD-351 Selection, Utilization, and Evaluation of Instructional Materials, 3 cr. Application of learning theory and curriculum principles to the selection, utilization, and evaluation of projected and non-projected instructional materials; laboratory experience in the use of projection and audio equipment.

C&I-INMD-352 Design and Production of Instructional Materials, 3 cr. Lecture and laboratory experience involving the design and production of materials for general instructional purposes. Attention will be given to the production of materials for specific media, (i.e., television).

C&I-INMD-401 The Theory of Programmed Instruction, 3 cr. Investigation of the Skinner and Crowder techniques of programmed instruction; a study of the history of teaching machines and techniques of devising a program of instruction in the various subject-matter disciplines. *Prereq.: graduate standing.*

C&I-INMD-404 Administration of Instructional Media Programs, 3 cr. Applies the principles of management to instructional media programs including the administration of integrated print and non-print materials. *Prereq.: graduate standing, one course in library science, and one course in media education.*

C&I-INMD-405 Advanced Design and Production of Instructional Materials, 3 cr. Lecture and laboratory experience involving design and production of complete units of instruction which utilize a multi-media approach to instructional design. *Prereq.: graduate standing and C&I-INMD-352.*

C&I-INMD-406 Advanced Studies in Technical Processes, 3 cr. An in-depth study of the Dewey Decimal Classification System—its cataloging principles, applications, and its organization for service to libraries. *Prereq.: graduate standing and C&I-INMD-332.*

C&I-INMD-407 Media Selection for Children and Young Adults, 3 cr. Problems in selection of media for children and young adults. Includes planning specific programs to meet user needs and emphasizes knowledge of literature and materials for these age levels. *Prereq.: graduate standing.*

C&I-INMD-408 The School Media Program, 3 cr. An advanced course focusing on the diverse programs, materials, limitations, and potentialities possible in elementary and secondary school media centers. Special problems in the organization and administration of school media centers will also be studied with emphasis on related available research in the area. *Prereq.: graduate standing.*

C&I-INMD-416 Library of Congress Classification, 3 cr. The study of the Library of Congress Classification Scheme and its adaptability to book collections. Emphasis centers on the use of the Library of Congress Classification Schedules and their respective special tables. *Prereq.: graduate standing and C&I-INMD-406.*

C&I-INMD-417 Microcomputer Applications for School Libraries, 3 cr. Course emphasis is on microcomputer utilization in school media centers—building of reference data bases, network hook-up and utilization, keyword retrieval aspects of online catalogs and data base file building for retrieval purposes. *Prereq.: graduate standing, C&I-INMD-316 and C&I-INMD-332 or consent of instructor.*

C&I-INMD-436 Introduction to Library Science Reference Methods, 3 cr. Critical examination of the reference function of the library materials center at the middle, junior, and senior high school levels. Production, use and evaluation of bibliographies and basic general reference sources. *Prereq.: graduate standing, C&I-INMD-331 and C&I-INMD-333, or C&I-INMD-334, or C&I-INMD-335.*

C&I-INMD-452 Advanced Seminar in Children/Young Adult Literature, 3 cr. Designed to bring teachers and school library specialists up to date with the changes and current happenings in selecting children's and young adults' print and non-print media. Topics include discussion of materials, concerns in the field, and material integration into the curriculum. *Prereq.: graduate standing, and C&I-INMD-333 or C&I-INMD-335 or C&I-INMD-407.*

C&I-INMD-467 Specific Computer Applications for School Media Centers, 3 cr. Course emphasis is on microcomputer utilization in school media centers—building of reference data bases, network hook-up and utilization, key-work retrieval aspects of online catalogs and data base file building for retrieval purposes. *Prereq.: graduate standing and C&I-INMD-417.*

C&I-INMD-498 Directed Field Experience: Practicum in Instructional Media, 3 cr. Skill development in a school library media center through supervised observation and directed practice. The internship is arranged in a selected school under the direct supervision of the instructor and a cooperating media specialist. *Prereq.: master's degree candidacy in instructional media and consent of instructor.*

C&I-INMD-499 Thesis Seminar: Instructional Media, 3 cr. (For students writing a thesis.) Guidance of students conducting research and writing a thesis to fulfill the requirements of the program, Master of Arts; Instructional Media.

Prereq.: master's degree candidacy in instructional media and consent of instructor.

LANGUAGE ARTS

Beverly Otto, Ph.D., Assistant Professor

GRADUATE PROGRAM

Master of Education in the Teaching of Language Arts

This program is designed to meet the in-service needs of elementary and secondary school teachers who desire graduate work in the Language Arts: English, Linguistics, Reading, and Speech and Performing Arts. The program is housed in the Department of Curriculum and Instruction. (See the Curriculum and Instruction section of this catalog.)

Graduates of this program should have updated and advanced knowledge of teaching children reading, listening, speaking, and writing skills; the principles of curriculum planning and development; and language arts research as well as approaches to teaching language arts to variously handicapped children in culturally diverse classes.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Students must present the following:

1. Fifteen credit hours of undergraduate course work in Education, including one course in methods of teaching reading or English.
2. Fifteen credit hours of undergraduate course work in Language Arts, including courses in drama, English, linguistics, literature, speech, or writing.
3. A copy of a valid standard state or Chicago teaching certificate (elementary or secondary level)
4. Completed application for admission to the program, indicating interest in following an elementary or a secondary education emphasis.

Requirements for the Degree:

1. A total of nine credit hours of required courses in Education.
2. A minimum of twelve credit hours in English, Linguistics, Reading, and Speech and Performing Arts.
3. Six credit hours of electives in Education.
4. A total of nine credit hours of electives in either Education or the Language Arts areas.
5. Two research papers (one required in SCED-421L).

6. A final oral exam scheduled early in the term following completion of all required course work.

Required Courses:

C&I-SCED-401 New Directions in the Teaching of English (for secondary school teachers) **or**
C&I-ELED-419 Problems in Elementary Language Arts Instruction (for elementary school teachers)3 cr.

EDFN-413 Human Relations and Leadership **or**
C&I-ELED-414 Principles of Curriculum Development3 cr.

C&I-SCED-421L Research in the Classroom
Teaching of Language Arts.....3 cr.

Subtotal 9 cr.

Elective Courses:

English:3 cr.

A minimum of one 3 credit hour course at the 300 or 400-level selected in consultation with the advisor.

Linguistics:3 cr.
A minimum of one 3 credit hour course. The following are recommended:

LING-306 Linguistics and Reading
LING-419 Fundamentals of Modern Linguistics
LING-480 Techniques of Teaching English as a Second Language
LING-481 Theories of Teaching English as a Second Language

Speech:3 cr.

A minimum of one 3 credit hour course. The following are recommended:

SPCH-COMM-315 Group Leadership
SPCH-COMM-404 Communication Theory
SPCH-COMM-418 Seminar-Research Problems in Group Communications
SPCH-COMM-428 Seminar-Research Problems in the Psychology of Communication
SPCH-ED-490 Specialized Problems in Speaking and Listening
SPCH-PERF-393 Creative Dramatics
SPCH-PERF-458 Seminar-Research Problems in Interpretive Arts

Reading:3 cr.

A minimum of one 3 credit hour course. The following are recommended:

READ-306 Linguistics and Reading
READ-401 Developmental Reading Theory
READ-402 Specialized Problems in Reading

Education:6 cr.

A minimum of two 3 credit hour upper division or graduate level courses offered by the Departments of Educational

Foundations, Curriculum and Instruction, Reading, and Counselor Education

Additional:9 cr.
Three 3 credit hour courses to be selected from the above Language Arts or Education areas

Total 36 cr.

NOTE: For description of course offerings please see pertinent sections of this catalog.

READING

Anita Kak Ambardar, Ph.D., Professor
Wayne Berridge, Ed.D., Professor, Chairperson
Linda Crafton, Ed.D., Professor
Ahmed A. Fareed, Ph.D., Professor
Daniel Pearce, Ph.D., Assistant Professor
Margaret Richek, Ph.D., Associate Professor
Sheila Shapiro, Ph.D., Assistant Professor
Kathleen Stevens, Ph.D., Associate Professor

The Department of Reading offers courses of study leading to an undergraduate minor and a graduate degree. The basic objectives of the Department of Reading are (1) to train teachers and prospective teachers to deal with student reading problems in elementary and secondary schools, (2) to prepare reading specialists who can diagnose reading difficulties as well as plan and implement developmental and remedial reading programs, and (3) to offer reading and study skills development courses to university students.

Minor in Reading (24 cr. hrs.)

The Reading Department offers a minor in reading consisting of 24 credit hours. The minor in reading has been approved for those Elementary Education majors who seek a K-9 teaching certificate. Please see the Elementary Education section of this catalog.

Required Courses:

COUN-321 Diagnosis and Treatment of Reading Difficulties3 cr.
READ-302 Teaching Reading in Content Fields.....3 cr.
READ-306 Linguistics and Reading.....3 cr.
READ-311 Fundamentals of Reading Instruction.....3 cr.
READ-312 Classroom Evaluation of Reading3 cr.
Choose **one** of the following:3 cr.
ENGL-391 Children's Literature3 cr.
C&I-ECED-325 Literature for Young Children3 cr.
C&I-INMD-335 Reading Guidance in the Elementary School.....3 cr.
Electives6 cr.
Choose **two** of the following:
READ-314 Teaching Reading to the Educable Mentally Handicapped Child **or**

SPED-332 Reading for the EMH Child3 cr.
READ-313 Materials for Reading3 cr.
READ-323(A-M) Reading Strategies3 cr.
Total 24 cr.

GRADUATE PROGRAM

Master of Arts in Reading

The master's program in Reading is designed to meet the urgent need for informed and trained specialists at both the elementary and secondary school levels. The specific objectives of the program are: to increase the students' knowledge of the nature and scope of the reading process; to advance professional training in the teaching of reading; to provide special training in diagnosis and remediation of reading difficulties; and to prepare students for leadership in planning, administering and supervising both developmental and remedial reading programs.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

Admission to the program requires a course in psychology or tests and measurements, and one of the following courses, or its equivalent:

READ-311 Fundamentals of Reading Instruction.....3 cr.
C&I-ECED-306 Teaching Reading—Primary through Upper Grades.....3 cr.
C&I-ELED-306 Methods of Teaching Reading—Elementary School3 cr.
READ-301 Teaching Reading in Junior and Senior High School3 cr.
READ-302 Teaching Reading in the Content Areas3 cr.

Requirements for the Degree:

Required Courses:

READ-313 Materials for Reading3 cr.
READ-401 Developmental Reading Theory.....3 cr.
READ-402 Specialized Problems in Reading Instruction.....3 cr.
READ-412 Measurement and Evaluation of Reading 3 cr.
READ-407 Case Studies in Diagnosis and Remediation of Reading Disabilities.....3 cr.
READ-403 Curriculum and Supervision in Reading3 cr.
READ-404 Clinical Practicum in Reading3 cr.
READ-405 Research Seminar in Reading.....3 cr.
Electives12 cr.

Four three-credit hour graduate courses must be taken to satisfy the elective requirements for the program. These electives must be approved by the Department of Reading graduate advisor.

Total 36 cr.

Thesis Option

Upon invitation by the program advisor at the time of acceptance to degree candidacy, a student has the option of writing a master's thesis for six hours of credit. The course, READ-406 Thesis Seminar: Reading, would take the place of two electives.

Research Papers

Students not writing a thesis will be required to prepare two comprehensive papers to be initiated in the required reading courses.

Final Examination

Upon completion of all required courses in the program, each student must pass a comprehensive examination.

Reading Clinic

The Department of Reading operates a Reading Clinic for the purpose of training graduate students in the techniques of diagnosis and remediation of reading disabilities. Students from the community who have reading problems attend. Diagnostic and instructional reports are forwarded to the parents. The diagnosis includes assessment of physical, psychological and environmental factors; and determination of recognition, comprehension and study strategy needs. Instruction is on a one-to-one basis and incorporates the latest techniques, materials and equipment.

COURSE OFFERINGS

READ-DEV-095 Reading Workshop, 3 cr. (May not be applied towards graduation). This course develops the prerequisite reading skills and strategies necessary to comprehend and recall college text material. Strengths and weaknesses are identified through diagnosis and self-assessment. The course concentrates on preparing for better understanding before reading, solving comprehension problems during reading, and extending comprehension after reading.

READ-101 Reading Development, 3 cr. Designed to provide opportunities for students to develop greater proficiencies in reading. Possible sub-titles include: Vocabulary, Comprehension, Study Skills, and Speed of Reading Comprehension.

READ-110 Critical Reading and Reasoning Strategies, 3 cr. This course enables entering freshmen to identify the ideas, skills and attitudes common to all undergraduate courses. Students' information-processing strategies are pre-assessed, analyzed, extended through guided instruction, and then post-assessed. The ultimate goal is the transfer of efficient information-processing strategies to the content of undergraduate courses.

READ-111 Reading for the ESL Student, 3 cr. Designed to meet the needs of non-native speakers of English who wish to improve their English reading comprehension. Active reading of English is promoted through intensive reading, vocabulary development, conversation and writing. Reading for meaning is emphasized. Understanding the importance of intercultural communications and understanding

the relationship between language and culture is developed.

READ-301 Teaching Reading in Junior and Senior High School, 3 cr. Explores theory, methodology, and problems involved in teaching reading at the junior and senior high school levels. Emphasis is on developing a working definition of reading and comprehension, diagnosing and understanding individual needs of normally achieving and reading handicapped students. Assessment of reading, understanding the relationship between reading and learning in content areas and practical strategies for improving comprehension of school materials are considered. **Prereq.:** junior standing.

READ-302 Teaching Reading in the Content Areas, 3 cr. Designed to assist pre- and in-service teachers in the teaching of reading in and through the content areas in grades 4-12. Focus is on the development of specific instructional methods derived from a sound theoretical base, and application of reading principles to problems encountered in content area reading with emphasis on practical ways to help all students including the handicapped. **Prereq.:** junior standing.

READ-306 Linguistics and Reading, 3 cr. An examination of the relationship between language structure and the reading process, with emphasis on practical problems, such as the variety of dialectally different sound-symbol correspondences in English. Other topics to be considered: the perception of speech sounds, the reader's interpretation of syntactic and semantic structures, various alphabetic systems for teaching beginning reading, and an analysis of linguistics texts for teaching reading. This course is designed to be useful to the in-service classroom teacher as well as to undergraduates.

READ-311 Fundamentals of Reading Instruction, 3 cr. An introduction to the teaching of reading; its nature, objectives, programs, materials, and organizational strategies. Development and evaluation of reading skills and interests, provision for reading growth among all learners, and improving reading in content areas are also discussed.

READ-312 Classroom Evaluation of Reading, 3 cr. Introduces principles of classroom evaluation. Standardized reading tests and informal measures for assessing normally achieving and reading handicapped readers' progress in reading are thoroughly analyzed. Students are provided with opportunities to analyze, administer, interpret, and/or design a wide variety of formal and teacher-made tests. **Prereq.:** READ-311 or equivalent.

READ-313 Materials for Reading, 3 cr. Provides students with opportunities to develop and analyze significant principles involved in the selection and evaluation of commercial reading materials, including traditional and non-traditional reading programs, supplementary specific skills materials, tradebooks, and content area materials. Emphasis is placed on criteria for selection and use of materials for effective reading instruction with normal and handicapped learners. **Prereq.:** READ-311 or equivalent.

READ-314 Teaching Reading to the Educable Mentally Handicapped Child, 3 cr. Specific principles, programs, and methods of teaching functional reading to the educable

mentally handicapped child. Diagnostic procedures and evaluation of reading growth are emphasized. Students are provided with both theoretical knowledge and practical experience in selecting, evaluating, designing, and developing reading materials for the EMH child. **Prereq.:** READ-311 or equivalent.

READ-315 Supervised Field Experience in Teaching Reading, 3 cr. Direct classroom experience in teaching reading to normally achieving and handicapped readers in local schools at different levels. Provided are supervision by a college instructor, seminars, and conferences with individual students. Limited to 15 students. **Prereq.:** READ-311, COUN-321, and written consent of instructor.

READ-321 Reading Strategies, 1 cr. Treats special topics in reading of an instructional nature. Concentrates on current and innovative strategies for improving reading, increased understanding of instructional techniques, and implementation of classroom reading strategies. Consult the Schedule of Classes for current offerings and information. Recent titles have included Individualizing Reading Instruction, Cognitive Skills for Reading, and Language Experience.

Prereq.: one reading course.

READ-322 Reading Strategies, 2 cr. (See READ-321 for description.)

READ-323 Reading Strategies, 3 cr. (See READ-321 for description.)

READ-330 Reading and Writing Processes, 3 cr. Focuses on the insights and instructional implications of recent research in the relationships between reading and writing. Examines various aspects of emergent literacy and the developmental stages of reading and writing. Strategies to foster individual growth in these areas and materials for planning, organizing and managing a reading/writing curriculum are treated. **Prereq.:** READ-311 or equivalent.

READ-340 Reading and Writing in the Content Area, 3 cr. Explores the development of classroom strategies to use writing in mastering content area subjects. Treats the integration of reading and writing in content area subject classes. **Prereq.:** READ-311 or equivalent.

READ-401 Developmental Reading Theory, 3 cr. Discussion and appraisal of the physiological, psychological, and psycholinguistic bases of the developmental reading process; discussion of learning theories as they relate to the teaching of reading; critical analysis of theoretical models and frameworks of the reading process and product, including discussion of models of reading and learning disability.

Prereq.: graduate standing; READ-311 or equivalent.

READ-402 Specialized Problems in Reading Instruction, 3 cr. Discussion of selected topics in reading related to instructional methods, classroom assessment techniques, types of reading programs, and innovations and trends of reading instruction. Also included are the topics of readability, content area reading, utilization of research in reading, and alternatives for meeting the reading needs of the exceptional learner. **Prereq.:** graduate standing, READ-311 or equivalent.

READ-403 Curriculum and Supervision in Reading, 3 cr. Treats principles and procedures in developing a sound

school curriculum in reading to meet the needs of normally achieving and handicapped students from varied ethnic and language backgrounds, the roles and responsibilities of reading consultants, coordinators, and supervisors; in-service reading programs; and the evaluation of reading programs. Surveys the impact of historical and current influences on the reading curriculum. **Prereq.:** graduate standing and READ-401.

READ-404 Clinical Practicum in Reading, 3 cr. Provides clinical experience in diagnosis and remediation of reading disability cases. Students diagnose and give remedial reading treatments to disabled individuals and small groups.

Prereq.: master's degree candidacy in reading, READ-401, READ-407, and written consent of program advisor.

READ-405 Research Seminar in Reading, 3 cr. Acquaints the student with sources and trends of completed research in the psychology, pedagogy, and sociology of reading; research design and procedures; criteria of planning and appraising scientific studies in reading. Project and/or research paper required. **Prereq.:** master's degree candidacy in reading, READ-401, READ-402, and written consent of program advisor.

READ-406 Thesis Seminar—Reading, 6 cr. Guidance of students conducting research and writing a thesis to fulfill the requirements of the program, Master of Arts in Reading.

Prereq.: master's degree candidacy in reading and invitation of program advisor.

READ-407 Case Studies in Diagnosis and Remediation of Reading Disabilities, 3 cr. A case study approach to the diagnosis and remediation of reading disabilities. Individual case studies are used to emphasize both casual and/or inhibiting factors in reading disability, as well as the analysis of the reading problem. Appropriate remedial instruction is related to diagnostic findings. **Prereq.:** graduate standing, READ-311 or equivalent.

READ-408 Topical Seminar in Reading, 3 cr. Presents detailed treatment of selected issues and concerns in Reading. Consult the Schedule of Classes for current offerings. Recent titles have included the Applications of Computers in Reading, Innovative Trends and Issues in Materials for Reading, Issues in Reading Comprehension, Physiology of the Reading Process, the Reading Process and Language Development, Innovations and Trends in Reading Assessment, Literacy Development, Psychological and Social Issues and Reading. **Prereq.:** graduate standing, six graduate hours in reading and consent of instructor.

READ-409 Advanced Reading Practicum, 3 cr. Provides in a clinical and/or on-site setting opportunities to explore innovative diagnostic and instructional practices. In-depth study of particular reading problems as well as overall reading program development is encouraged. **Prereq.:** graduate standing; two graduate courses in reading and consent of instructor.

READ-412 Measurement and Evaluation of Reading, 3 cr. Introduction to informal and formal evaluation instruments in reading; basic concepts in measurement and evaluation; techniques of test development, evaluation, and interpretation. Applies reading assessment instruments to reading programs. **Prereq.:** graduate standing; READ-311 or equivalent.

SECONDARY EDUCATION

Christine Swarm, Ed.D., Professor, Coordinator

(See listing of faculty in the Department of Curriculum and Instruction section of this catalog.)

A professional education sequence in secondary education is offered by the Department of Curriculum and Instruction. The secondary education sequence leads to entitlement in fourteen secondary certification programs in the following subject areas:

Art
Biology
Chemistry
Earth Science
English Education
French
Geography
History
Mathematics
Music
Physical Education
Physics
Social Science
Spanish
Speech and Performing Arts

Please note that the Secondary Education Sequence alone does not constitute a major at Northeastern. Students seeking secondary teacher certification declare a major in an academic subject area. The secondary education program qualifies as "an area of study in addition to the major" and fulfills graduation requirements.

Each certification program involves three types of requirements: (a) requirements for an academic major; (b) specific general education requirements; and (c) professional secondary education requirements.

Upon completion of these requirements, students are expected to demonstrate: 1) a depth of knowledge in their chosen academic discipline; 2) a knowledge of the principles of human growth and development and of learning; 3) a knowledge of students with varying racial, cultural, and socioeconomic backgrounds; 4) a knowledge of the wide range of abilities and special needs of students; and 5) the ability to apply their knowledge and skills as they develop effective learning experiences for students during the methods and the clinical components of the professional education sequence.

Requirements for an Academic Major

Students seeking the Illinois Standard High School Certificate must fulfill all requirements for their academic major. For specific information about major requirements, please refer to the catalog entry for the relevant department.

To be certified in **some** academic areas, students are required to make prescribed choices among given electives in the academic major and/or they are required to complete

additional courses in their academic area. These prescribed choices and/or additional required courses are specified below for each academic major.

Art

The Major in Art for the Bachelor of Arts Degree meets the requirements for secondary teacher certification. To fulfill requirements for certification, students must select the emphasis in Studio Art.

Biology

The Major in biology for the Bachelor of Science Degree meets the requirements for secondary teacher certification with the following stipulations. Students seeking certification to teach biology in secondary schools are required to complete 8 semester hours in botany including 5 semester hours in laboratory work and 8 semester hours in zoology including 5 semester hours in laboratory work. Students seeking certification to teach biology in secondary schools may elect to complete the optional Environmental Emphasis if they complete the above specified requirements in botany, zoology, and laboratory work.

Chemistry

The Major in Chemistry for the Bachelor of Science Degree meets the requirements for secondary teacher certification.

Earth Science

The Major in Earth Science for the Bachelor of Science Degree meets the requirements for secondary teacher certification.

English Education

The Major in English Education for the Bachelor of Arts Degree meets the requirements for secondary teacher certification.

French

The Major in French for the Bachelor of Arts Degree meets the requirements for secondary teacher certification.

Geography

The Major in Geography for the Bachelor of Arts Degree meets the requirements for secondary teacher certification.

History

The Major in History for the Bachelor of Arts Degree meets the requirements for secondary teacher certification with the following stipulations. Students seeking certification to teach United States History in secondary schools are required to complete 8 semester hours in United States History. To be certified to teach history, students must have 16 semester hours in history.

Mathematics

The Major in Mathematics for the Bachelor of Arts Degree meets the requirements for secondary teacher certification.

Music

The Major in Music for the Bachelor of Arts Degree including both Emphasis Va: Secondary Education: Vocal Music and Emphasis Vb: Secondary Education: Instrumental Music meet the requirements for secondary teacher certification.

Physical Education

Students seeking certification to teach physical education in secondary schools should refer to the Department of Health, Physical Education, Recreation and Athletics section of this catalog.

Physics

The major in physics for the Bachelor of Science Degree meets the requirements for secondary teacher certification.

Social Science

The Major in Social Science for the Bachelor of Arts Degree meets the requirements for secondary teacher certification with the following stipulations. Students seeking certification to teach United States History in secondary schools must complete at least 8 semester hours in United States History. Students seeking certification to teach World History in secondary schools must complete at least 8 semester hours in World History and 5 semester hours in United States History.

Spanish

The Major in Spanish for the Bachelor of Arts Degree meets the requirements for secondary teacher certification.

Speech

The Major in Speech for the Bachelor of Arts Degree meets the requirements for secondary teacher certification with the following stipulations. Students seeking certification to teach speech in secondary schools are required to complete 18 semester hours in speech selected from the following four areas: public speaking, interpersonal communication, oral interpretation, and group discussion. In addition, 6 semester hours are required in rhetoric and composition.

Specific General Education Requirements

As part of the University General Education Program, all students seeking entitlement for secondary teacher certification in Illinois (including those with degrees) must complete the following:

1. A minimum of nine credits in natural sciences and mathematics;
2. A minimum of eight credits in the language arts (English composition, linguistics, reading, and speech and performing arts), including those language arts credits completed for Northeastern's humanities requirement;
3. A minimum of six credits in the humanities other than the language arts (art, music, foreign language, literature, and philosophy);
4. A minimum of nine credits in the social sciences, includ-

ing one course in American history, one course in American government and one course in non-Western or Third-World cultures.

5. A health education course (HPER-HLED-305 Health Education in the Secondary School, 2 credits);
6. A physical education "activity" course, 1 credit;
7. Additional work in any of the above fields and/or psychology (except educational psychology) to total 42 credits. (According to the **Minimum Requirements for State Certification** of the Illinois State Board of Education, if the area of specialization (academic major) is the same as one of the general education categories, then the same courses may be used for both requirements.)

Illinois Senate Bill 195 requires that all students attending state universities must pass the United States and Illinois constitutions exam. Students may satisfy this requirement by passing the examination offered by the university or by successfully completing an appropriate course as listed under university graduation requirements.

Professional Education Requirements

The Illinois State Board of Education requires all students enrolled in teacher certification programs to complete 100 hours of clinical experience in a recognized elementary or secondary school prior to student teaching. The professional education requirements are as follows:

EDFN-305 Philosophical and Historical Foundations of Public Education.....	3 cr.
EDFN-306 Education and Individual Differences.....	3 cr.
This course includes ten clock hours of clinical experience in an appropriate school.	
EDFN-307 Psychology of Instruction and Learning.....	3 cr.
This course includes 10 clock hours of clinical experience in an appropriate school.	
C&I-SCED-301 Methods of Teaching on the Secondary Level	3 cr.
C&I-SCED-302 Field Experience in the Secondary School	2 cr.
This course requires 40 clock hours of supervised clinical experience in an appropriate secondary school.	
*C&I-SCED-303 Methods of Teaching in the Secondary School	3 cr.
C&I-SCED-304 Clinical Experiences in the Secondary School.....	3 cr.
C&I-SCED-305 Secondary Student Teaching and Seminar	9 cr.
Total	29 cr.
* Music majors must complete 4 credit hours of SCED-303.	

NOTE: All secondary education students must be admitted to the College of Education before they can register for Clinical Experience and Student Teaching. **To be entitled**

for certification a student must earn a grade of "B" or better in Student Teaching.

NOTE: All students must consult with their advisors in their academic major and the Secondary Education Program.

COURSE OFFERINGS

C&I-SCED-301 Methods of Teaching on the Secondary Level, 3 cr. Selection, organization, and use of materials and methods that are common to all subject areas in the secondary school. Discussion of the unit, the lesson plan, discipline, class discussion, and other elements of methodology necessary for effective teaching. Emphasis on planning and methodology to meet individual student needs including needs of exceptional students. To be taken concurrently with C&I-SCED-302. **Prereq.:** EDFN-305, EDFN-307, and 21 hours in the academic major.

C&I-SCED-302 Field Experience in the Secondary School, 2 cr. A 40-clock-hour supervised field experience in a public or private secondary school in metropolitan Chicago designed to complement and provide a real setting for instruction in the methods course, C&I-SCED-301. Experience may include some or all of the following: observing secondary school students and teachers, analyzing the teaching-learning situation, tutoring individual students, working with small groups of students, and assisting teachers. Requires experience with a broad range of students, including exceptional students. To be taken concurrently with C&I-SCED-301.

C&I-SCED-304 Clinical Experiences in the Secondary School, 3 cr. A supervised clinical experience designed with less emphasis on observational experiences and more on direct involvement in the instructional process. Requires experience with a broad range of students, including exceptional students. Placement is in the school where student will be student teaching later in the term. To be taken with the academic methods course.

C&I-SCED-352 Construction of Evaluation Instruments for Secondary Teaching, 3 cr. Various types of evaluation instruments will be explained with respect to their usage by secondary classroom teachers. Particular emphasis will be placed on the construction of achievement tests. **Prereq.:** C&I-SCED-301 or teaching experience.

C&I-SCED-361 Workshop in Secondary Education I, 1 cr. Course is designed for providing in-service opportunities for secondary teachers in the fields of English, mathematics, history, and social studies. **Prereq.:** valid teaching certificate.

C&I-SCED-363 Workshop in Secondary Education III, 3 cr. Course is designed for providing in-service opportunities for secondary teachers in the field of English, mathematics, history, and social studies. **Prereq.:** valid teaching certificate.

C&I-SCED-401E New Directions in Teaching English in the Junior and Senior High School, 3 cr. Designed for the in-service teacher of secondary school English; study and discussion of new perspectives for the school English program growing out of the reform efforts of the past decade.

Prereq.: graduate standing, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-401H New Directions in Teaching History in the Junior and Senior High School, 3 cr. In-depth treatment of selected new and experimental methodologies of teaching history in the secondary school. Also included are materials from other social science disciplines as they relate to the teaching of history. Since new trends are constantly finding their way in the teaching of secondary history, the course content will also correspondingly change. **Prereq.:** graduate standing, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-401M New Directions in Teaching Mathematics in the Junior and Senior High School, 3 cr. Designed to focus on teaching strategies for the development of mathematical concepts, principles, and skills that are suggested in the current literature. The applicability of these strategies to the class participant's particular school and classroom will be emphasized. Participants will also select areas of specific interest for personal study, e.g., teaching mathematics to the exceptional student. **Prereq.:** graduate standing, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-407 Teaching Multi-Ethnic Literature in Junior and Senior High Schools, 3 cr. Designed for junior and senior high school teachers who have limited knowledge and experience in teaching ethnic minority literature. The course will emphasize curriculum design, teaching techniques, and the assessment of appropriate instructional resources. The ultimate purpose of the course is to enable teachers to integrate effectively the multi-ethnic literary experience into traditional literature programs. **Prereq.:** graduate standing and a teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-408 The Nature of Mathematical Abilities in School children, 3 cr. An exploration of mathematical learning by all students (K-12), with emphasis on the processes used by exceptional students. The differences that are shown by these students when doing mathematics will be examined, and with this information the class will focus on teaching practices that are most appropriate to these students' needs. **Prereq.:** graduate standing and teacher certification or consent of instructor.

C&I-SCED-409 Teaching Mathematical Problem Solving in the Secondary Schools, 3 cr. An examination of the logical understanding of mathematical problem solving with emphasis on improving competence in teaching problem solving to secondary students; includes theoretical study, preparation of materials, and observations and demonstrations in the teaching of problem solving. **Prereq.:** admission to master of science program in mathematics, secondary education, or a teaching certificate in mathematics.

C&I-SCED-410 Computers in the Teaching of Secondary School Mathematics, 3 cr. A computer application course, using BASIC, designed for teachers of secondary school mathematics. Examples from algebra, geometry, trigonometry, number theory, and probability and statistics will serve as the basis for programming activities. Strategies

for effectively using the computer and computer software in the teaching of mathematics will be discussed. **Prereq.:** graduate standing; a course in BASIC programming or consent of instructor.

C&I-SCED-421L Research in Classroom Teaching of Language Arts, 3 cr. Designed to acquaint the student with research in contemporary trends in teaching the language arts, including reading; critical appraisal and discussion of classical and current studies in language arts will provide specific suggestions useful in classroom practice; an overview of the entire area, as well as opportunity for individual study in-depth of a specific area related to the student's need and interest; in-service teachers may become involved in action research. **Prereq.:** master's degree candidacy, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-421M Research in Classroom Teaching of Mathematics, 3 cr. Designed to acquaint the student with the general principles of research in the teaching of mathematics, analytical examination of the various research studies with special emphasis on the new mathematics. **Prereq.:** master's degree candidacy, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

C&I-SCED-421S Research in Classroom Teaching of Social Studies, 3 cr. Designed to acquaint the student with the general principles, patterns and problems of research in the teaching of social studies; study of some specific findings in the field of social studies research. **Prereq.:** master's degree candidacy, teaching certificate, or teachers with degrees who have at least one year of teaching experience.

Art

C&I-SCED-303A Contemporary Art Education in the Secondary School, 3 cr. Designed to develop inquiry and understanding of many problems of communicating or teaching art in the secondary school. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. To be taken in the Fall trimester before student teaching in the Winter. **Prereq.:** 30 hours in art.

C&I-SCED-305A Secondary Student Teaching and Seminar in Art, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school art. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken during the Winter trimester with C&I-SCED-304. **Prereq.:** C&I-SCED-301, C&I-SCED-303A and approval of art department.

English Education

C&I-SCED-303E Methods of Teaching English in the Secondary School, 3 cr. Introduction to the methods, techniques and materials for teaching English in secondary schools. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. To be taken with C&I-SCED-304. **Prereq.:** C&I-SCED-301 and 36 hours in the academic major.

C&I-SCED-305E Secondary Student Teaching and Seminar in English, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school English. Supervised by secondary school personnel and a university supervisor who also conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. **Prereq.:** 36 hours in academic major.

Foreign Languages

C&I-SCED-303F Teaching Modern Foreign Language in the Secondary School, 3 cr. Introduction to the methods, techniques and materials for teaching foreign languages in the secondary school. Emphasis is on mastery of selected skills on a performance basis and meeting individual student needs. **Prereq.:** FL-FREN-315 (for French majors), FL-SPAN-319 and FL-SPAN-320 (for Spanish majors), 27 hours in academic major and consent of instructor.

C&I-SCED-305F Secondary Student Teaching and Seminar in Foreign Language, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in secondary school foreign language. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken during professional trimester with FL-300 and C&I-SCED-303F. **Prereq.:** C&I-SCED-301 and approval of department and/or second level proficiency test.

Geography

C&I-SCED-303G Methods of Teaching Geography in the Secondary School, 3 cr. A study of the materials and techniques utilized in the teaching of geography on the secondary level. Areas of concentration include an examination of the various forms of subject organization and the place of geography in the secondary curriculum, an introduction to the literature of methodology, a study of current trends, and the findings of research. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. Taken prior to student teaching in the senior year, with concurrent registration in C&I-SCED-304. **Prereq.:** C&I-SCED-301 and 21 hours in geography.

C&I-SCED-305G Secondary Student Teaching and Seminar in Geography, 12 cr. Fifteen weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school and a weekly two-hour seminar associated with the student teaching program. Requires experience with a broad range of students, including exceptional students. **Prereq.:** C&I-SCED-303G, at least 24 hours in geography, and approval of department.

History

C&I-SCED-303H Methods of Teaching History in the Secondary School, 3 cr. Demonstration of specific organi-

zational patterns and teaching methods in history, teaching for critical thinking, and trends in the teaching of history. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. To be taken with C&I-SCED-304 and C&I-SCED-305H. **Prereq.:** C&I-SCED-301 and 24 hours in academic major.

C&I-SCED-305H Secondary Student Teaching and Seminar in History, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school history. Supervised by secondary school personnel and a university supervisor who also conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken during the professional trimester with C&I-SCED-303H and C&I-SCED-304. **Prereq.:** 24 hours in academic major.

Mathematics

C&I-SCED-303M Methods of Teaching Mathematics in the Secondary School, 3 cr. Strategies for teaching concepts, principles, and mathematical skills. Emphasis on problem solving, proof, and planning and methodology to meet individual student needs, including needs of exceptional students. To be taken with C&I-SCED-305M and C&I-SCED-304. **Prereq.:** C&I-SCED-301 and 30 hours in mathematics.

C&I-SCED-305M Secondary Student Teaching and Seminar in Mathematics, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school mathematics. Supervised by secondary school personnel and a university supervisor who also conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. **Prereq.:** C&I-SCED-301 and 30 hours in mathematics.

Music

C&I-SCED-303I Methods and Techniques of Teaching Music in the Secondary Schools: Instrumental, 2 cr. Methods and materials utilized in teaching and organizing music classes and performing groups in the secondary schools; major emphasis upon general music classes, music rehearsal, and performance problems in vocal music. **Prereq.:** C&I-SCED-301 and consent of advisor.

C&I-SCED-303V Methods and Techniques of Teaching Music in the Secondary Schools: Vocal, 2 cr. Methods and materials utilized in teaching and organizing music classes and performing groups in the secondary schools; major emphasis upon general music classes, music rehearsal, and performance problems in instrumental music. **Prereq.:** C&I-SCED-301 and consent of advisor.

C&I-SCED-305N Secondary Student Teaching and Seminar in Music, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in secondary school music. Supervised by secondary school personnel and a university supervisor, who conducts a weekly

two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken during the professional trimester with MUS-393L and C&I-SCED-303. **Prereq.:** C&I-SCED-301, advanced junior or senior standing, and department approval.

Physical Education

C&I-SCED-305P Secondary Student Teaching and Seminar in Physical Education, 9 cr. Participation in directing learning experiences in secondary physical education at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly two-hour seminar and critique. Requires experience with a broad range of students, including exceptional students. (full-day, Winter term) **Prereq.:** approval of department chairperson, senior standing, C&I-SCED-301, and HPER-PEMA-344.

Science

C&I-SCED-303R Materials and Methods for Teaching High School Science, 4 cr. Interpretation of the content and structure of those areas of natural sciences generally included in secondary school curricula; recent developments in curriculum organization and teaching materials; methods of teaching in the classroom and laboratory, including team teaching and other individualized guided study programs. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. Offered during Fall term only. **Prereq.:** one term of chemistry, one of physics, one of biology, and C&I-SCED-301.

C&I-SCED-305B Secondary Student Teaching and Seminar in Biology, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school biology. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken concurrently with or immediately following C&I-SCED-303R and C&I-SCED-304. **Prereq.:** approval of department, senior standing, and C&I-SCED-301.

C&I-SCED-305C Secondary Student Teaching and Seminar in Chemistry, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school chemistry. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken concurrently with or immediately following C&I-SCED-303R and C&I-SCED-304. **Prereq.:** approval of department, senior standing, and C&I-SCED-301.

C&I-SCED-305D Secondary Student Teaching and Seminar in Earth Science, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in

one or more levels of secondary school earth science. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken concurrently with or immediately following C&I-SCED-303R and C&I-SCED-304. **Prereq.:** approval of department, senior standing, and C&I-SCED-301.

C&I-SCED-305Q Secondary Student Teaching and Seminar in Physics, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school physics. Supervised by secondary school personnel and a university supervisor, who conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken concurrently with or immediately following C&I-SCED-303R and C&I-SCED-304. **Prereq.:** approval of department, senior standing, and C&I-SCED-301.

Social Science

C&I-SCED-303S Methods of Teaching General Social Studies in the Secondary School, 3 cr. Discussion and demonstration of organizational patterns and teaching methods in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. To be taken with C&I-SCED-304. **Prereq.:** C&I-SCED-301 and 36 hours in academic major.

C&I-SCED-305S Secondary Student Teaching and Seminar in General Social Studies, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more of the following disciplines: anthropology, economics, political science, psychology, and sociology. Supervised by secondary school personnel and a university supervisor who also conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students including exceptional students.

Prereq.: 36 hours in academic major.

Speech

C&I-SCED-303T Speech Activities in the Secondary School, 3 cr. Principles and practice in the teaching of speech to adolescents; activities, contests, and festivals; presents trends in the teaching of speech and an evaluation of current teaching materials. Emphasis on planning and methodology to meet individual student needs, including needs of exceptional students. **Prereq.:** in-service teacher or nine hours in speech and C&I-SCED-301.

C&I-SCED-305T Secondary Student Teaching and Seminar in Speech, 9 cr. Ten weeks of full-day student teaching providing practical teaching experience in one or more levels of secondary school speech. Supervised by secondary school personnel and a university supervisor, who

conducts a weekly two-hour seminar associated with student teaching. Requires experience with a broad range of students, including exceptional students. To be taken during professional trimester with C&I-SCED-304 and C&I-SCED-303R. **Prereq.:** C&I-SCED-301, senior standing, and approval of advisor.

SPECIAL EDUCATION

Dorothy Bernstein, Ph.D., Associate Professor
Ellen Fiedler-Brand, Ph.D., Assistant Professor
Rita Brusca, Ed.D., Associate Professor
Elizabeth Dooley, Ph.D., Assistant Professor
Rosemary Egan, Ph.D., Professor
Edmund Hunt, Ph.D., Professor
Kenneth James, Ph.D., Associate Professor
Janet Lerner, Ph.D., Professor
Barbara Lowenthal, Ed.D., Associate Professor
Jeffrey Messerer, Ph.D., Professor
Ellen Olinger, Ed.D., Assistant Professor
Lynne Reynolds, Ph.D., Associate Professor
Thomas Schevers, Ph.D., Associate Professor
Patricia Walsh Schutt, Ph.D., Professor, Chairperson
Martin Steigman, Ph.D., Professor

The special Education Department has as its primary aim, the education of teachers and as a long-range goal, the preparation of professionals with the potential for providing significant leadership in the field.

The special Education faculty trains teachers in adherence to the belief that every child is entitled to a free and appropriate public education, provided by trained teachers in a setting which represents the least restrictive environment. Students develop their knowledge and skills in the field of Special Education in general, and in one or more areas of emphasis.

UNDERGRADUATE PROGRAM

Major in Special Education for the Bachelor of Arts Degree

The major in Special Education is designed to meet state teacher certification requirements by training students to be:

1. knowledgeable about all exceptionalities including characteristics, assessment and methodology that is appropriate; and
2. able to utilize this knowledge in regular classrooms and in special programs designed for students with handicaps.

There are two program options available to students who choose to major in Special Education.

Option A: Students have a double major in Special Education and in Elementary Education. In this program students choose one of the three sequences in special Education: 1) learning disabilities, 2) behavior disorders, or 3) mental retardation.

Option B: Students major in special Education and choose one of three concentrations: 1) learning disabilities/behavior

disorders, 2) learning disabilities/educable mental retardation, or 3) behavior disorders/educable mental retardation.

Both Special Education options have the following 18 credit hours of core course requirements:

EDFN-305 Philosophical and Historical Foundations of Public Education	3 cr.
EDFN-306 Education and Individual Differences	3 cr.
SPED-303 Educational and Psychological Evaluation in Special Education	3 cr.
SPED-304 Psychology of Exceptional Children or SPED-204 The Exceptional Individual in School and Society	3 cr.
SPED-312 Assessment of Exceptional Individuals	3 cr.
SPED-321 Teaching Individuals with Behavior Disorders	3 cr.
Subtotal	18 cr.

Option A in Special Education prepares teachers in one of three areas of Special Education: 1) learning disabilities, 2) behavior disorders, or 3) mental retardation.

Students must select and complete one of the following sequences:

Learning Disabilities Sequence

SPED-310 Characteristics of Individuals with Learning Disabilities	3 cr.
SPED-311 Teaching Individuals with Learning Disabilities	3 cr.
SPED-320 Characteristics of Individuals with Behavior Disorders	3 cr.
SPED-319 Practice Teaching-Learning Disabilities	6 cr.
SPED approved electives	6 cr.
Subtotal	21 cr.

Behavior Disorders Sequence

SPED-310 Characteristics of Individuals with Learning Disabilities	3 cr.
SPED-311 Teaching Individuals with Learning Disabilities	3 cr.
SPED-320 Characteristics of Individuals with Behavior Disorders	3 cr.
SPED-329 Practice Teaching in Behavior Disorders	6 cr.
Select one of the following:	3 cr.
SPED-306 Play and Creative Expression for the Academically Handicapped Child	3 cr.
SPED-307 Vocational Preparation for the Academically Handicapped Child	3 cr.
SPED approved elective	3 cr.
Subtotal	21 cr.

Mental Retardation Sequence

SPED-311 Teaching Individuals with Learning Disabilities	3 cr.
SPED-330 Characteristics of Individuals with mental Retardation	3 cr.
SPED-331 Teaching Individuals with Mental Retardation	3 cr.
SPED-339 Practice Teaching: Educable Mental Retardation	6 cr.
Select one of the following:	3 cr.
SPED-306 Play and Creative Expression for the Academically Handicapped Child	3 cr.
SPED-307 Vocational Preparation for the Academically Handicapped Child	3 cr.
SPED-320 Characteristics of Individuals with Behavior Disorders	3 cr.
SPED approved elective	3 cr.
Subtotal	21 cr.
Total	39 cr.

Option B prepares teachers in two areas of Special Education, students must meet with an advisor to determine the best sequence of courses to select as follows:

Learning Disabilities/Behavior Disorders (LD/BD)

SPED-310 Characteristics of Individuals with Learning Disabilities	3 cr.
SPED-311 Teaching Individuals with Learning Disabilities	3 cr.
SPED-307 Vocational Preparation for the Academically Handicapped Child or SPED-395 Microcomputers in Special Education or SPED-306 Play and Creative Expression for the Academically Handicapped Child	3 cr.
SPED-319 Practice Teaching: Learning Disabilities	6 cr.
SPED-320 Characteristics of Individuals with Behavior Disorders	3 cr.
SPED-322 Management Strategies and Curriculum for Teaching Individuals with Behavior Disorders	3 cr.
SPED-323 Consultation in Special Education	3 cr.
SPED-329 Practice Teaching in Behavior Disorders	6 cr.
READ-311 Fundamentals of Reading Instruction	3 cr.
Subtotal	33 cr.

Learning Disabilities/Educable Mental Retardation (LD/EMR)

SPED-310 Characteristics of Individuals with Learning Disabilities	3 cr.
SPED-311 Teaching Individuals with Learning Disabilities	3 cr.
SPED-319 Practice Teaching: Learning Disabilities	6 cr.
SPED-323 Consultation in Special Education	3 cr.

SPED-330 Characteristics of Individuals with Mental Retardation.....	3 cr.
SPED-331 Teaching Individuals with Educable Mental Retardation.....	3 cr.
SPED-307 Vocational Preparation for the Academically Handicapped Child or	
SPED-395 Microcomputers in Special Education or	
SPED-306 Play and Creative Expression for the Academically Handicapped Child.....	3 cr.
SPED-339 Practice Teaching: Educable Mental Retardation.....	6 cr.
READ-311 Fundamentals of Reading Instruction.....	3 cr.
Subtotal	33 cr.

Behavior Disorders/Educable Mental Retardation (BD/EMR)

SPED-306 Play and Creative Expression for the Academically Handicapped Child.....	3 cr.
SPED-320 Characteristics of Individuals with Behavior Disorders.....	3 cr.
SPED-323 Consultation in Special Education.....	3 cr.
SPED-329 Practice Teaching in Behavior Disorders.....	6 cr.
SPED-330 Characteristics of Individuals with Mental Retardation.....	3 cr.
SPED-331 Teaching Individuals with Educable Mental Retardation.....	3 cr.
SPED-307 Vocational Preparation for the Academically Handicapped Child or	
SPED-395 Microcomputers in Special Education or	
SPED-332 Reading for the Educable Mentally Handicapped Child.....	3 cr.
SPED-339 Practice Teaching with Educable Mentally Handicapped Child.....	6 cr.
READ 311 Fundamentals of Reading Instruction.....	3 cr.
Subtotal	33 cr.

Students in Option B complete a minor in History, Earth Science, Mathematics, Biology, Geography and Environmental Studies, or another approved content area.

ADDITIONAL REQUIREMENTS FOR CERTIFICATION

In addition to the successful completion of the Special Education major and one of the approved minors, students must complete the general education requirements for the Illinois Standard Elementary Certificate.

Requirements which are a part of Northeastern's 42 hour General Education Program and are on the Limited List:

Fine Arts (6 hours)

Humanities (9 hours)

English Literature.....	3 cr.
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SPCH-COMM-100 Introduction to Communication.....	3 cr.
Elective.....	3 cr.

Behavioral and Social Science (12 hours)

HIST-214 U.S. History 1607-1877 or	
HIST-215 U.S. History 1877-Present.....	3 cr.
PSCI-AMER-216 American National Government.....	3 cr.
Non Western Third World course.....	3 cr.
Elective.....	3 cr.

Natural Sciences (12 hours)

Science Laboratory Course.....	3 cr.
Electives.....	9 cr.

Interdisciplinary/Professional Studies (3 hours)

SPED-304 Psychology of Exceptional Children or	
SPED-204 The Exceptional Individual in School and Society.....	3 cr.

Total 42 cr.

General Education Requirements which are **not** on the Limited List:

Communication Skills:

ENGL-101 Writing I.....	3 cr.
ENGL-102 Writing II or	
ENGL-235 Introduction to Creative Writing.....	3 cr.
HPER-HLED-301 Health Education in the Elementary School.....	2 cr.
Mathematics.....	3 cr.

Total 11 cr.

Special Requirements

Students must meet all requirements for admission to the College of Education including demonstration of competence in mathematics, reading, and oral and written language. All Special Education majors will be required to earn a grade of "C" or better in required Special Education sequence courses. A grade of "D" in any required Special Education course will not be accepted toward the Special Education major. The student may repeat a "D" course once. If a student fails to get a "C" or better, the student will be dropped as a Special Education major.

All students must be admitted to the College of Education before they can register for practice teaching. Students who are completing the Elementary Education major must complete ELED-329 Elementary Student Teaching and Seminar, 9 cr., before they can begin practice teaching in Special Education. To be entitled for certification a student must earn a grade of "B" or better in Practice Teaching and Student Teaching.

GRADUATE PROGRAM

Master of Arts in Special Education

The Special Education graduate program provides students with advanced study designed to develop their knowledge and skills in the field of Special Education in general, as well

as in one of the following seven areas of emphasis: learning disabilities, behavior disorders, educable mental retardation, trainable mental retardation, gifted and talented, early childhood special education, and handicapped adolescents.

The graduate of a Master's program sequence will be able to 1) design and implement programs for exceptional individuals; 2) advise and consult with others on the needs of exceptional individuals; and 3) analyze and conduct research in the field of special education.

Requirements for Admission to the Program:

Students must fulfill the requirements for admission to the Graduate College.

All applicants are required to have **two letters of recommendation** submitted in support of their applications. These letters should be addressed directly to the Dean of the Graduate College. The recommendations should be made by persons who have had a supervisory relationship with the applicant in a teaching situation. For applicants with little or no prior teaching experience, letters will be accepted from student teaching supervisors or from professors of education who have observed the applicant's potentialities as a teacher in the area of Special Education.

Students must have the following courses or their equivalents as prerequisites: Educational Psychology or Psychology of Learning; Child or Adolescent Development (with the exception of students opting for the Gifted and Talented, and Educating Handicapped Adolescents sequences); Teaching of Reading or Language Arts (with the exception of students opting for the Early Childhood Special Education sequence); Educational and Psychological Evaluation in Special Education (SPED-303, with the exception of Early Childhood Special Education sequence) and Psychology of Exceptional Children (SPED-304).

Requirements for the Degree:

1. Thirty six approved graduate credit hours.
2. Master's Degree project.
3. Six hours of practicum in an approved special education setting (exception: three hours of practicum required for the Handicapped Adolescents sequence). Application for Practicum must be made six months in advance of the time when the student expects to enroll in the Practicum courses.
4. A valid State of Illinois teaching certificate at the time of degree candidacy (exceptions: teaching certificate is not required for Early Childhood sequence).
5. Applicants for degree candidacy may also be required to attend an interview.
6. Candidates seeking entitlement in programs approved for State of Illinois Teacher Certification (LD, BD, EMH, TMH) must document 100 hours of clinical experience at the elementary and secondary levels in their area of exceptionality. This can be done through verification of teaching experience

or through enrollment in SPED-301 Supervised Field Experience II.

Advisement

All students will be assigned an advisor. It is expected that students will plan their programs in consultation with their advisors. Prerequisite and required courses may be waived when competence can be demonstrated.

SEQUENCE I: Teaching Educable Mentally Handicapped Children and Youth

SPED-330 Characteristics of Individuals with Mental Retardation.....	3 cr.
SPED-410 Identification and Diagnosis of Learning Disabilities.....	3 cr.
SPED-411 Remediation and Planning in Learning Disabilities.....	3 cr.
SPED-431 Teaching Individuals with Educable Mental Retardation.....	3 cr.
SPED-438 Practicum I: Educable Mental Retardation.....	3 cr.
SPED-439 Practicum II: Educable Mental Retardation.....	3 cr.
SPED-490 Research Seminar in Special Education or	
SPED-433 Seminar in Curriculum Development for Individuals with Mental Retardation.....	3 cr.
and five electives.....	15 cr.
Subtotal	36 cr.

SEQUENCE II: Teaching Trainable Mentally Handicapped Children and Youth

SPED-330 Characteristics of Individuals with Mental Retardation.....	3 cr.
SPED-410 Identification and Diagnosis of Learning Disabilities.....	3 cr.
SPED-441 Teaching Individuals with Trainable Mental Retardation.....	3 cr.
SPED-448 Practicum I: Trainable Mental Retardation.....	3 cr.
SPED-449 Practicum II: Trainable Mental Retardation.....	3 cr.
SPED-490 Research Seminar in Special Education or	
SPED-433 Seminar in Curriculum Development for Individuals with Mental Retardation.....	3 cr.
and six electives.....	18 cr.
Subtotal	36 cr.

SEQUENCE III: Educating Children with Behavior Disorders

SPED-402 Counseling Strategies in Special Education.....	3 cr.
SPED-420 Identification and Assessment of Behavior Disorders.....	3 cr.
SPED-421 Advanced Strategies in Behavior Management.....	3 cr.

SPED-422 Seminar I in Behavior Disorders.....	3 cr.
SPED-423 Seminar II in Behavior Disorders.....	3 cr.
SPED-427 Curriculum and Planning for Individuals with Behavior Disorders.....	3 cr.
SPED-428 Practicum I: Behavior Disorders.....	3 cr.
SPED-429 Practicum II: Behavior Disorders.....	3 cr.
SPED-490 Research Seminar in Special Education.....	3 cr.
and three electives.....	9 cr.
Subtotal	36 cr.

SEQUENCE IV: Teaching Children with Learning Disabilities

SPED-410 Identification and Diagnosis of Learning Disabilities.....	3 cr.
SPED-411 Remediation and Planning in Learning Disabilities.....	3 cr.
SPED-412 Principles of Diagnostic Testing.....	3 cr.
SPED-413 Seminar in Learning Disabilities.....	3 cr.
SPED-418 Practicum I: Learning Disabilities.....	3 cr.
SPED-419 Practicum II: Learning Disabilities.....	3 cr.
SPED-490 Research Seminar in Special Education.....	3 cr.
and five approved electives.....	15 cr.
Subtotal	36 cr.

SEQUENCE V: Teaching the Gifted and Talented Child

SPED-450 Psychology of the Gifted Child.....	3 cr.
SPED-451 Creativity.....	3 cr.
SPED-452 Education of the Gifted Child.....	3 cr.
SPED-453 Seminar in Curriculum and Materials for the Gifted.....	3 cr.
SPED-455 Bibliography and Methodology in Research for the Gifted Child.....	3 cr.
SPED-456 Parenting and Advocacy for the Gifted Child.....	3 cr.
SPED-457 Research Seminar for the Gifted.....	3 cr.
SPED-459 Field Demonstration in Gifted Education.....	3 cr.
and four electives.....	12 cr.
Subtotal	36 cr.

SEQUENCE VI: Early Childhood Special Education

SPED-484 Psychology of Language and Cognitive Development or ECED-313 Language Development and Educational Implications or ECED-408 Language Acquisition and Intervention Strategies for Teachers of Young Children.....	3 cr.
C&I-ECED-403 Early Childhood Assessment.....	3 cr.
C&I-ECED-410 Curriculum Development in Early Childhood Education.....	3 cr.
C&I-ECED-411 Practicum in Early Childhood Education.....	3 cr.

SPED-481 Principles of Diagnosis and Teaching the Child with Special Needs Aged Three to Six Years.....	3 cr.
SPED-482 Assessment and Intervention with Infants and Toddlers who are At-Risk or Handicapped.....	3 cr.
SPED-483 Working with Parents of Young Children with Special Needs.....	3 cr.
SPED-488 Practicum in Early Childhood Special Education.....	3 cr.
SPED-490 Research Seminar in Special Education.....	3 cr.
Three electives (must be selected in consultation with advisor).....	9 cr.
Subtotal	36 cr.

Comprehensive Examination: All students must successfully complete a comprehensive examination.

SEQUENCE VII: Educating Handicapped Adolescents

SPED-400 Vocational/Career Planning for Adolescents with Handicaps.....	3 cr.
SPED-403 Assessment of the Adolescent with Handicaps.....	3 cr.
SPED-405 Educational Planning for Handicapped Adolescents.....	3 cr.
SPED-406 Handicapped Adolescents: Educational Principles and Theories.....	3 cr.
SPED-407 Seminar: Educating the Adolescent with Handicaps.....	3 cr.
COUN-467 Vocational Theory and Occupational Information.....	3 cr.
SPED-408 Practicum in Educating Handicapped Adolescents.....	3 cr.
SPED-490 Research Seminar in Special Education.....	3 cr.
Four electives.....	12 cr.
Subtotal	36 cr.

COURSE OFFERINGS

SPED-204 The Exceptional Individual in School and Society, 3 cr. Survey of characteristics and behaviors of exceptional individuals in American society including educational, recreational, vocational and other settings. Examines the evaluation and treatment of people with learning disabilities, physical handicaps, hearing and visual impairment, behavior disorders, mental retardation, speech and language disorders and giftedness. This course will serve to dispel misunderstandings about the needs and contributions of exceptional people and help toward the acceptance and integration of exceptional individuals into the mainstream of American society.

SPED-301 Supervised Field Experience II, 3 cr. Clinical experience for graduate students: observation and participation in classes for handicapped children; preschool—high school according to student's selected area of concentration.

Designed to meet State of Illinois requirements for 100 hours of clinical experience. **Prereq.:** consent of instructor.

SPED-303 Educational and Psychological Evaluation in Special Education, 3 cr. Basic concepts in assessing and evaluating exceptional students, as well as educational programs. Methods for selecting, administering, and interpreting standardized tests, including competencies in validity, reliability, norming, and standard scores. Individual and group tests of aptitude, achievement, personality, diagnostic testing, and criterion referenced measures; checklists, rating scales, anecdotal records, minimum competency testing, and individual educational programs to monitor student's progress.

SPED-304 Psychology of Exceptional Children, 3 cr. Psychology and identification of exceptional children. Methods of teaching exceptional children. Includes children and adolescents who are learning disabled, mentally retarded, emotionally disturbed, orthopedically handicapped, and other health impaired, sensorily impaired, speech and language handicapped, multi-handicapped, and gifted. **Prereq.:** a course in child or adolescent development or equivalent.

SPED-305 Principles of Speech Pathology for the Classroom Teacher, 3 cr. Pathologies of speech and language structure—phonemic, morphologic, and syntactic—as they appear in speech and language disorders; physical, social and psychological considerations; the teacher's role in understanding and management. **Prereq.:** SPED-304.

SPED-306 Play and Creative Expression for the Academically Handicapped Child, 3 cr. Activities and experiences designed to provide basic understanding of the role of play and creative expression in a curriculum for the academically handicapped. Methods and materials which enable play and creative expression to motivate, implement, and integrate the academic program. **Prereq.:** SPED-304. Undergraduate credit only.

SPED-307 Vocational Preparation for the Academically Handicapped Child, 3 cr. Methods, materials and procedures, and prevocational preparation needed by the academically handicapped child as a basis for acquiring the skills and experiences necessary for vocational competence. **Prereq.:** SPED-304.

SPED-308 Independent Study in Exceptionality I, 3 cr. Special projects about exceptional children. **Prereq.:** SPED-304 and consent of instructor.

SPED-309 Independent Study in Exceptionality II, 3 cr. Advanced research and study about exceptional children. **Prereq.:** SPED-308 and consent of instructor.

SPED-310 Characteristics of Individuals with Learning Disabilities, 3 cr. Characteristics and disorders of children and adolescents with learning disabilities. Historical development of the field. Theoretical perspectives. Current practices and issues regarding identification and education. **Prereq.:** SPED-303 and SPED-304. Undergraduate credit only.

SPED-311 Teaching Individuals with Learning Disabilities, 3 cr. Special methods, materials, and approaches for the teaching of students with learning disabilities in the areas of reading, language, mathematics, writing, and non-verbal areas; various organizational and administrative solu-

tions for meeting the needs of these students. **Prereq.:** SPED-310. Undergraduate credit only.

SPED-312 Assessment of Exceptional Individuals, 3 cr. Formal and informal assessment procedures. Demonstration administration and interpretation of commonly used tests. Use of assessment data in planning the individualized educational program. 50-75 clinical experience hours in area(s) of concentration. **Prereq.:** SPED-303, SPED-304, and either SPED-310, or SPED-320 or SPED-330. Undergraduate credit only.

SPED-319 Practice Teaching: Learning Disabilities, 6 cr. Practice teaching combined with seminar discussions. Bridging the theoretical aspects of learning disabilities with an understanding of their practical application within the classroom. **Prereq.:** all required courses in sequence. Undergraduate credit only.

SPED-320 Characteristics of Individuals with Behavior Disorders, 3 cr. The concept of mental health. Interaction of family, social, cultural, physical, and psychological factors affecting the adjustment and mental health of the child; preventative and treatment programs; meeting the child's emotional needs in regular and special classes. **Prereq.:** SPED-304.

SPED-321 Teaching Individuals with Behavior Disorders, 3 cr. An introduction to theories and approaches and their application in the management and influence of behavior in special education settings. Emphasis is given to academic and social/emotional behaviors. 50-75 clinical experience hours in area(s) of concentration. **Prereq.:** SPED-304. Undergraduate credit only.

SPED-322 Management Strategies and Curriculum for Teaching Individuals with Behavior Disorders, 3 cr. Designed to train future teachers in procedures for working with behavior disordered children and youth and in making program/curriculum decisions for these individuals. Topics covered include curriculum concerns, methods, materials, classroom organization, working with parents, working as part of a team, the range of placements for the behavior disordered and special consideration for each setting. **Prereq.:** SPED-320 and SPED-321.

SPED-323 Consultation in Special Education, 3 cr. An introduction to the consultant's role in special education. Topics covered include mainstreaming, curriculum modification, conferencing techniques, grading and graduation issues, in-service education, supervision, pupil stress, and teacher burn-out and stress. Special emphasis will be given to developing effective communication skills. **Prereq.:** SPED-312, SPED-320, SPED-310 or SPED-330.

SPED-329 Practice Teaching in Behavior Disorders, 6 cr. Supervised classroom teaching experience combined with seminar discussions. The school as a social system; classroom management; the teacher's personal qualities; culture and personality dynamics; educational technology; pupil and parent counseling. **Prereq.:** completion of all required courses in SPED sequence. Undergraduate credit only.

SPED-330 Characteristics of Individuals with Mental Retardation, 3 cr. Characteristics of retarded functioning of all degrees, ranging from mild to profound retardation, including individuals at all age levels. Exploration of prob-

lems in diagnosis and identifications of retardation. Etiology and the relationship of retarded functioning to various syndromes. Implications of research findings for diagnosis, education, and other services, including vocational training, residential programs, community programs, and services to parents.

Prereq.: SPED-304.

SPED-331 Teaching Individuals with Educable Mental Retardation, 3 cr. Curriculum planning including: construction and implementation of individual educational plans; adapting and selecting curriculum; materials and methods of instruction; classroom management; vocational planning and evaluation procedures. *Prereq.: SPED-330. Undergraduate credit only.*

SPED-332 Reading for the Educable Mentally Handicapped Child, 3 cr. Laboratory course concerning various methods of teaching reading to children with a demonstrated developmental lag; utilization of methods and materials which will aid in communicative ability; the skills needed for individualization, adapting and writing material for specific reading problems. *Prereq.: ECED-306 or ELED-306 or consent of instructor.*

SPED-333 Augmented Communication for Exceptional Individuals, 3 cr. Alternative communication methods for helping handicapped children and youth with impaired speech and language abilities to learn to communicate; techniques such as total communication, language board, and electrical devices will be demonstrated and practiced.

SPED-339 Practice Teaching: Educable Mental Retardation, 6 cr. Supervised teaching of the educable mentally handicapped child, combined with seminar discussions; examination of the problems of diagnosis, theoretical approaches, and suggested teaching techniques; curriculum, and organization of instruction; pupil and parent counseling.

Prereq.: all required courses in EMH sequence. Undergraduate credit only.

SPED-341 Teaching Individuals with Trainable Mental Retardation, 3 cr. The trainable mentally handicapped individual in school and society; data based instruction, sequencing instruction, programming, structuring environment, strategies for training, adapting curricula and materials, and parents as partners. Undergraduate credit only.

Prereq.: SPED-330.

SPED-360 Identification and Education of Preschool Children with Handicaps, 3 cr. This course focuses on techniques for identifying and teaching handicapped preschool children. Emphasizes the identification and analysis of the problems of handicapped preschool children. Investigates theoretical frameworks and strategies for teaching handicapped preschoolers. Explores the teacher's role in coordinating services with other professionals and in communicating with parents. The course is taught on a non-categorical model and applies to all handicapping conditions.

Prereq.: SPED-304.

SPED-390 Educating Persons with Autism, 3 cr. Designed for those interested in an overview of the etiology, characteristics, history, and treatment of autism. This class will provide a basic understanding of autism for those who may desire to teach and for those who are likely to interact with persons with autism in other educational settings.

SPED-391 Contemporary Problems and Issues in Special Education, 1 cr. An examination of specific concerns and issues in the field of special education.

SPED-392 Contemporary Problems and Issues in Special Education, 2 cr. (See SPED-391 for description.)

SPED-393 Contemporary Problems and Issues in Special Education, 3 cr. (See SPED-391 for description.)

SPED-395 Microcomputers in Special Education, 3 cr. Microcomputer uses in Special Education for exceptional students, their teachers, and administrators. Includes special peripherals for handicapped students, IEP's, CAI, tutorials, programming, authoring languages, management programs, and the computer as a creative tool. Hands on uses of software and programming will be emphasized. *Prereq.: SPED-304.*

SPED-400 Vocational/Career Planning for Adolescents with Handicaps, 3 cr. Issues in vocation/career planning for special education secondary students utilizing assessment information, interest, and aptitude findings for vocational/career planning, including methodology, material, resources, and alternative programs. *Prereq.: graduate standing and SPED-304 or consent of instructor.*

SPED-402 Counseling Strategies in Special Education, 3 cr. Specific techniques and strategies that may be utilized by the teacher in counseling pupils, parents, and in consulting with other professionals. Special emphasis will be given to developing techniques for establishing counseling strategies, effective communication, and influencing changes in attitudes and behavior. *Prereq.: graduate standing.*

SPED-403 Assessment of Adolescents with Handicaps, 3 cr. The course will focus on techniques for the administration and interpretation of formal and informal assessment devices for the handicapped adolescent. Measures of aptitude, achievement, attitude as well behavioral observation will be highlighted. Emphasis is placed on the educational and vocational/career planning of the handicapped adolescent. *Prereq.: graduate standing, SPED-303 and SPED-304.*

SPED-405 Educational Planning for Handicapped Adolescents, 3 cr. This course examines concepts, methods, materials and instructional techniques for teachers and other personnel who will train adolescents with learning disabilities, behavior problems or cognitive impairments. *Prereq.: graduate standing and SPED-304.*

SPED-406 Handicapped Adolescents: Educational Principles and Theories, 3 cr. Introduction to the field of educating handicapped adolescents. Review of adolescent psychology, study of characteristics of handicapped adolescents, and current issues in the field. *Prereq.: SPED-303 and SPED-304.*

SPED-407 Seminar: Educating the Adolescent with Handicaps, 3 cr. Develop skills to critically evaluate professional literature, study research in the field. *Prereq.: SPED-400, SPED-403, SPED-405 and SPED-406.*

SPED-408 Practicum in Educating Handicapped Adolescents, 3 cr. The student will be exposed to a variety of hands-on experiences with handicapped adolescents. The experience will include exposure to adolescents with a variety

ty of handicaps and varying degrees of severity. Experiences will include placements in one or more of the following: vocational centers, special education classrooms, community agencies and alternative schools. *Prereq.: admission to candidacy, SPED-304, SPED-403 and SPED-405.*

SPED-410 Identification and Diagnosis of Learning Disabilities, 3 cr. Characteristics and disorders of children with learning disabilities. Theoretical frames of reference for diagnosis. Behavioral characteristics, test interpretation, implications for remediation, current issues, and trends in assessment. *Prereq.: graduate standing and SPED-303.*

SPED-411 Remediation and Planning in Learning Disabilities, 3 cr. Principles of teaching children with learning disabilities. Specific techniques and materials for remediation of disabilities in perception, memory, spoken language, reading, written language, and nonverbal functions. Planning the individualized school program. Role of the learning disabilities teacher in working with parents, classroom teachers, and other professionals. Current issues and trends in remediation and school programming. *Prereq.: graduate standing and SPED-410.*

SPED-412 Principles of Diagnostic Testing, 3 cr. Techniques of testing and interpretation of tests in educational diagnosis; familiarity with commonly used assessment instruments; techniques and practice in administering individual diagnostic tests; methods of informal assessment; interpretation of clinical reports. *Prereq.: graduate standing, SPED-303 and SPED-410.*

SPED-413 Seminar in Learning Disabilities, 3 cr. An in-depth analysis of recent research and current problems in the field of learning disabilities, theoretical frameworks, diagnostic tools, and teaching strategies to be analyzed. *Prereq.: master's degree candidacy, SPED-411, SPED-412, and SPED-418.*

SPED-418 Practicum I: Learning Disabilities, 3 cr. Supervised teaching experience with children and youth who have learning disabilities. Includes techniques in assessment and remediation. *Prereq.: master's degree candidacy, SPED-411 and SPED-412.*

SPED-419 Practicum II: Learning Disabilities, 3 cr. Advanced teaching experience with learning disabled children and youth. Includes techniques in assessment and remediation. *Prereq.: master's degree candidacy and SPED-418.*

SPED-420 Identification and Assessment of Behavior Disorders, 3 cr. Behavioral characteristics of students with behavior disorders; theoretical perspectives of behavior disorders and implications for the design of treatment programs; review of the latest research findings in the field. *Prereq.: graduate standing and SPED-304.*

SPED-421 Advanced Strategies of Behavior Management, 3 cr. Application of behavior modification, developmental, cognitive, and other contemporary strategies for the management of behavior in special education settings. Emphasis will be placed on methods for working with children with behavior disorders (social/emotional problems).

Prereq.: graduate standing and SPED-304.

SPED-422 Seminar I in Behavior Disorders, 3 cr. Current research on issues, problems, and characteristics of

individuals with mild and moderate behavior disorders. Topics will include noncompliance, attention deficit disorder, and others. Implications regarding placement and treatment. *Prereq.: graduate standing; SPED-420.*

SPED-423 Seminar II in Behavior Disorders, 3 cr. Current research on the issues, problems, and characteristics of individuals with severe behavior disorders. Topics will include child and adolescent psychoses, autism, and others. Placement and treatment will be discussed. *Prereq.: graduate standing; SPED-420.*

SPED-424 Social Skills Training in Special Education, 3 cr. Small group interaction will be utilized to explore and experience methods of teaching social and interpersonal skills. Emphasis will include personal acquisition of helping skills and training techniques and their application with students, parents, and other professionals. *Prereq.: graduate standing; SPED-402.*

SPED-425 Seminar I in Group Process, 3 cr. Experiential approach to examining small group processes and characteristics. Theories and models of effective group functioning as related to classroom, parent, and team meetings. Special emphasis will be placed on learning and practicing the roles and skills of group leadership. *Prereq.: graduate standing; SPED-402 and consent of instructor.*

SPED-426 Seminar II in Group Process, 3 cr. Group process is used to examine models of effective organizational functioning as a basis for organizational design, assessment, and growth planning. Principles and skills of supervision, collaboration, and consultation will be practiced in small groups as a basis for further application in professional settings. *Prereq.: graduate standing; SPED-402, SPED-425 and consent of instructor.*

SPED-427 Curriculum and Planning for Individuals with Behavior Disorders, 3 cr. Special instructional problems and needs of individuals with Behavior Disorders. Strategies for individualizing instruction, curriculum development, interfacing academic and social-emotional objectives, and building transdisciplinary collaboration. *Prereq.: graduate standing; SPED-420.*

SPED-428 Practicum I: Behavior Disorders, 3 cr. Introductory professional experience in educating children with behavior disorders; emphasis on experience with intervention techniques, planning diagnosis, staffing, and parent/pupil counseling. *Prereq.: master's degree candidacy and completion of required courses.*

SPED-429 Practicum II: Behavior Disorders, 3 cr. Advanced supervised professional experiences in educating children with behavior disorders in an appropriate setting; seminar discussions. *Prereq.: master's degree candidacy and completion of all required courses.*

SPED-431 Teaching Individuals with Educable Mental Retardation, 3 cr. Historical and societal perceptions of the educable mentally handicapped child; curriculum, materials, organization of instruction, teaching methods, and techniques based on a consideration of the needs and characteristics of this type of atypical child. *Prereq.: graduate standing, SPED-304.*

SPED-432 Special Instructional Problems of Individuals with Educable Mental Retardation, 3 cr. Special problems in the instruction of the educable mentally handicapped child; curriculum building, academic workshops, counseling, guidance, community relations, evaluation, and research. *Prereq.:* graduate standing, SPED-431 or SPED-330 or consent of instructor.

SPED-433 Seminar in Curriculum Development for Individuals with Mental Retardation, 3 cr. Group and individual research and discussion designed to help prospective teachers of educable mentally handicapped children, use of curriculum guides and materials to assist in adjusting academic plans to the individual; discovering motivating factors; assembling, adapting, and creating materials; consideration of various methods of teaching. *Prereq.:* master's degree candidacy and consent of advisor.

SPED-438 Practicum I: Educable Mental Retardation, 3 cr. Professional experience teaching educable mentally handicapped students, with emphasis on visits to and observations of community educational, medical, diagnostic, rehabilitation, and other social services for educable mentally handicapped children and youth. Focus of pupil/parent counseling and collaboration with social agencies. *Prereq.:* master's degree candidacy and completion of all required courses.

SPED-439 Practicum II: Educable Mental Retardation, 3 cr. Advanced supervised professional experience in teaching educable mentally handicapped children in appropriate settings; seminar discussions. *Prereq.:* master's degree candidacy and completion of all required courses.

SPED-441 Teaching Individuals with Trainable Mental Retardation, 3 cr. The trainable mentally handicapped class in the modern program of public education; objectives of instruction, organization of instructional programs, methods and techniques for teaching groups of more severely retarded; parent counseling, workshops, recreation. *Prereq.:* graduate standing and SPED-304.

SPED-448 Practicum I: Trainable Mental Retardation, 3 cr. Professional experience in educating trainable mentally handicapped children with emphasis on visits to community educational, medical, diagnostic, rehabilitation, and other social service facilities for trainable mentally handicapped children and youth; focus on pupil and parent counseling and collaboration with social agencies. *Prereq.:* master's degree candidacy and completion of required courses.

SPED-449 Practicum II: Trainable Mental Retardation, 3 cr. Advanced supervised professional experience in educating trainable mentally handicapped children in appropriate settings; seminar discussions. *Prereq.:* master's degree candidacy and completion of all required courses.

SPED-450 Psychology of the Gifted Child, 3 cr. The gifted and creative in society and how they are identified, with consideration of their psychological, social, and educational characteristics; implications for instruction, administration, counseling, and guidance. *Prereq.:* graduate standing and SPED-304 or consent of instructor.

SPED-451 Creativity, 3 cr. Discussion and inquiry into the nature and nurture of creative ability, intensive review of research in creativity, practical application of creative processes,

ways to develop creative thinking. *Prereq.:* graduate standing, SPED-304, or consent of instructor.

SPED-452 Education of the Gifted Child, 3 cr. Issues in the education of the gifted; administrative and instructional provisions; evaluation research; instructional approaches in language arts, mathematics, science, social studies, and fine arts for the gifted; discovery and inquiry; motivation and underachievement; fostering creativity. *Prereq.:* graduate standing and SPED-450 or consent of instructor.

SPED-453 Seminar in Curriculum and Materials for the Gifted, 3 cr. An intensive review and development of instructional materials in specific curriculum areas with special reference to their appropriateness for use with gifted and creative children. *Prereq.:* graduate standing, SPED-450, or SPED-452.

SPED-455 Bibliography and Methodology in Research on the Gifted Child, 3 cr. Introduction to the techniques employed in educational research. Projects include library research, writing abstracts, analytical critiques of research, evaluation of statistical reporting, and development of an extensive annotated bibliography in gifted education.

SPED-456 Parenting and Advocacy for the Gifted Child, 3 cr. Survey of the skills needed to enhance the social and emotional development of the gifted child. Methods for obtaining local, state and national support of programs for the Gifted.

SPED-457 Research Seminar for the Gifted, 3 cr. A study of the research literature on gifted children; emphasis on research methodology, interpretation of data, and application to educational problems and provisions concerning the gifted; a research project is required. *Prereq.:* graduate standing, SPED-450, SPED-452 and SPED-453.

SPED-459 Field Demonstration in Gifted Education, 3 cr. Field work in programming for gifted/talented children. Independent project in identification, talent retrieval, teaching strategies, organizational plans, methods, or materials suitable for the education of talented children. Placement in school settings or on-campus gifted summer school program. *Prereq.:* SPED-450, SPED-452, SPED-453, and acceptance for candidacy.

SPED-460 Medical Aspects of Crippling Conditions in Children, 3 cr. Characteristics of physically and medically handicapping conditions that may affect school aged children. Designed to assist the teacher in understanding these conditions to facilitate educational intervention. *Prereq.:* graduate standing and SPED-304.

SPED-461 Education of Individuals with Physical Handicaps, 3 cr. Education of the physically handicapped in a variety of settings; hospital and home instruction; education of the physically handicapped in regular classes and special schools; instruction at the nursery-kindergarten, primary, elementary, and high school levels; administrative considerations; consideration of multiple handicaps; occupational therapy; physical therapy; personal and educational counseling. *Prereq.:* graduate standing and SPED-304.

SPED-470 Administration and Supervision in Special Education, 3 cr. Introduction to special education administration including legal and financial aspects, staff and community relations, mainstreaming, facilities, and curricular

design; students will have an opportunity to solve problems using case studies and simulated materials. *Prereq.:* graduate standing, EDFN-421 and SPED-410.

SPED-481 Principles of Diagnosis and Teaching the Child with Special Needs Aged Three to Six Years, 3 cr. Principles of diagnosis and teaching the young handicapped child. Aspects of assessment include screening, formal and informal tests, and use of diagnostic information to plan individualized educational program. Theory and practice of teaching techniques for the young handicapped child; discussion of the role of the special education teacher in working with other members of the multidisciplinary team and with parents. Current issues. *Prereq.:* graduate standing and SPED-304 or equivalent.

SPED-482 Assessment and Intervention with Infants and Toddlers who are At-Risk or Handicapped, 3 cr. Principles of assessment and intervention with the handicapped and at-risk infant and toddler (ages birth to 3) and parents. Theory and practice of intervention techniques. Transdisciplinary role of parent-infant educator. Current research and issues. *Prereq.:* graduate standing and SPED-304.

SPED-483 Working with Parents of Young Children with Special Needs, 3 cr. This course will develop skill in working with families of young (birth to six year old) handicapped children. Issues such as family communication, seeking help from outside agencies, parent-infant bonding, and securing legal rights to service are covered. *Prereq.:* graduate standing and SPED-304.

SPED-484 Psychology of Language and Cognitive Development, 3 cr. This course introduces the student to the basic concepts of developmental psycholinguistics and the principles of intervention in pathological language processes. Theories of Chomsky, Piaget, Vygotsky, Freud and Erikson are covered.

SPED-488 Practicum in Early Childhood Special Education-Teaching Young Children with Special Needs, 3 cr. Advanced supervised professional clinical experience in educating young handicapped infants, toddlers, or preschoolers in an appropriate setting; seminar discussions. *Prereq.:* master's degree candidacy and completion of all required courses.

SPED-490 Research Seminar in Special Education, 3 cr. Research literature on special problems in exceptionality. Research project under the supervision of a faculty advisor. *Prereq.:* degree candidacy.

SPED-491 Thesis Credit in Special Education, 3 cr. Research project within the area of applicant's field of specialization. *Prereq.:* completion of all required courses in the master's degree sequence, acceptance for degree candidacy, and consent of advisor.

SPED-494 Research Seminar in Exceptionality, 3 cr. Experimental method applied in a group research project in a specialized area of exceptionality. *Prereq.:* degree candidacy and consent of instructor.

CENTER FOR INDIVIDUALIZED STUDIES

Board of Governors Degree

The Board of Governors/Bachelor of Arts Degree Program (BOG/BA) is specifically designed to meet the needs of adults whose work and family responsibilities may prevent full-time enrollment in a traditional program. It enables students to complete graduation requirements through an alternative and self-paced approach to higher education.

Admission Requirements:

All interested persons are required to attend one of the prospective student meetings held each term where applications for admission are accepted.

Graduation Requirements:

Students must satisfactorily complete 12 credits each in the humanities, social sciences, and natural sciences or mathematics. This requirement is generally waived for community college graduates who hold an A.A. or A.S. degree. Forty of the 120 credit hours required for graduation must be taken at the upper-division level. Students must successfully complete the constitution examination and required competency examinations. Graduation requirements may be met through previous college-level studies, college-equivalent knowledge and skills, and learning outcomes of life/work experiences. Credit for non-classroom prior learning is awarded on the basis of evaluation and recommendation by Northeastern faculty or other professionals in appropriate fields of knowledge. With credits transferred into the program, all passing grades are accepted for courses taken for credit at accredited colleges or universities. After being admitted to the program, a student will receive no credit toward the Board of Governors Bachelor of Arts Degree for any course in which a grade below "C" is earned. More specific information is available in the BOG/BA office, extension 3303.

University Without Walls

The University Without Walls Program (UWW) at Northeastern Illinois University is a self-paced baccalaureate degree program that offers a wide variety of learning opportunities to adult students. The UWW student's academic program, which incorporates on-campus and off-campus learning experiences and may include work-related activities and past learning, is designed by the student in collaboration with academic and community advisors. Contact the UWW office, 583-4050, extension 3327 or 3328 for further information.

Program for Interdisciplinary Education

The Program for Interdisciplinary Education (PIE) exists to promote and support the study of selected topics using more

than one disciplinary or departmental perspective. The goal is to integrate the separate perspectives in order to better understand complex problems.

PIE sponsors 10 to 20 team-taught seminars each term. The titles, content and instructors change every term and are published as separate listings in the Schedule of Classes in the section entitled "Center for Program Development." While they differ from regular courses because they are team-taught and theme-based, registration procedures for PIE seminars are the same as for regular undergraduate courses.

In addition to the seminars, PIE supports students in independent interdisciplinary projects both on campus and off campus. Students, working with two or more faculty advisors from different departments, may propose projects worth from 1 to 15 credit hours and thus may custom-tailor a portion of their college experience to their personal academic objectives.

Kaskaskia (An Individualized Major Program)

Kaskaskia is a non-traditional bachelor's degree program for students preparing for careers that require a multi-disciplinary approach. A Kaskaskia student draws upon the many resources available in the total university community. The individualized program created by student and advisor may include courses in departments or programs, PIE projects, independent study, internships and field experiences. Kaskaskia students are expected to concentrate on in-depth study in two or more academic areas.

The Kaskaskia Plan admits applicants on a continuing basis. Application to the Kaskaskia Plan program should be made when the student has completed at least 40 credit hours but no more than 90 credit hours. Contact Dr. David Helfand, the acting coordinator, at extension 6269 for further information.

INTERNATIONAL/INTERCULTURAL STUDIES

Gary L. Bevington, Ph.D., Professor of Linguistics, Coordinator
Yass Alkafaji, D.B.A., Associate Professor
Accounting, Business Law and Finance
Saba Ayman-Nolley, Ph.D., Assistant Professor
Psychology
L. Jayne Botscharow, Ph.D., Professor of
Anthropology
Mary Louise Burger, Ed.D., Professor
Curriculum and Instruction
Phyllis Goldblatt, Ph.D., Professor
Educational Foundations
Edgardo Pantigoso, Ph.D.
Foreign Languages and Literature (Spanish)
Zahid Shariff, D.P.A., Professor
Political Science
Margo Smith, Ph.D., Professor
Anthropology

Edward Stuart, Ph.D., Assistant Professor
Economics
Barbara Winston, Ph.D., Professor
Geography and Environmental Studies

The International/Intercultural Studies Program offers an interdisciplinary minor designed to acquaint students with a variety of cultures and their influence on the way people think and act. Courses address issues facing all peoples of the world. As students learn to appreciate the diversity of languages and cultures at home and abroad, they not only enrich their personal lives, but enhance their preparation for a rewarding professional career by giving an international/intercultural perspective to their major.

Although not required to do so, students in this program are urged to study a second language and to experience another culture by study, travel or work abroad.

The program coordinator serves as advisor for students choosing an International/Intercultural Studies minor.

UNDERGRADUATE PROGRAM

Minor in International/Intercultural Studies (21 cr. hrs.)

Required Courses:

SSCI-I/IS-101	Introduction to International Studies3 cr.
SSCI-I/IS-102	Introduction to Intercultural Studies3 cr.
SSCI-I/IS-301	Senior Seminar in International/Intercultural Studies3 cr.
Four courses in an approved area of concentration*	12 cr.
		Total 21 cr.

*Students should determine their area of concentration as well as individual courses within this area in consultation with the program advisor. They may either select a field of special interest to them or choose one of the areas listed below:

- Geographic area: Latin America, Africa, Asia, Western Europe or other area chosen in consultation with the advisor.
- International problems: pollution, population, food, war and peace—or other area chosen in consultation with the advisor.
- International business: courses must be chosen from the following list:
 ANTH-240 Culture and International Business
 ECON-322 International Economics
 G&ES-212 Economic Geography
 G&ES-350 Marketing Geography
 PSCI-IR-313 Contemporary International Relations
 MKTG-358 International Marketing
 MKTG-367 Exporting
 MNGT-398 International Business

COURSE OFFERINGS

SSCI-I/IS-101 Introduction to International Studies, 3 cr. The global nature of the contemporary world: ecological and social systems and their interconnectedness; global resources and the economic and political arrangements needed to handle these resources equitably: issues such as energy, population, and food.

SSCI-I/IS-102 Introduction to Intercultural Studies, 3 cr. Insights into and appreciation of the cultural diversity of the peoples of the world: issues such as ethnocentrism, cultural relativism, intergroup relations and intercultural communication. Attention to analytical and problem solving skills and the scientific methodology related to the issues.

SSCI-I/IS-201 You, Your Community and the World, 3 cr. The relationships of students as residents of Chicago with the global community. Students take an inventory of the international links of the metropolitan community and study ways to participate more fully in this dimension of life.

SSCI-I/IS-301 Senior Seminar in International/Intercultural Studies, 3 cr. Field experience or field research assignment (100 hours a term) with one of the following agencies: an ethnic organization, a governmental or non-governmental international or intercultural organization; an international or intercultural business. Six hours of preparatory seminar meetings during the first two weeks of the trimester followed by two hours of seminar meetings during the rest of the term. The seminars will review needed skills for the field work/research assignment and help students develop learning goals which match each student's needs and agency capability. **Prereq.:** SSCI-I/IS-101 and 102.

SSCI-I/IS-310 Business in the Pacific Basin Market Area, 3 cr. Introduction to the geography, politics, and economics of the Pacific Basin market area with special attention to Japan and the newly industrialized countries of Asia, the prospects for a formal Pacific Basin community, and the dynamics of doing business in foreign cultures.

SOCIAL SCIENCE

Edward C. Uliassi, Ph.D., Professor of Political Science,
Coordinator, Social Science Program
Nancy Spencer, M.A., Assistant Professor of
Anthropology, Coordinator, Education Sequences
in Social Science

The Social Science program offers undergraduate interdisciplinary programs including the Bachelor of Arts degree sequences for liberal arts majors and for majors seeking certification in secondary education, a liberal arts minor, a minor for students earning the Bachelor of Arts degree in elementary education, and a separately-listed minor in international/intercultural studies (see International/Intercultural Studies).

Courses are selected from those offered by the Departments of Anthropology, Economics, Geography and Environmental

Studies, History, Political Science, Psychology, Sociology, and the Social Science Program.

Field experience and internships are available through the Social Science Program in cooperation with participating departments. For details, contact the program coordinator.

Admission to each major or minor through the appropriate coordinator is required.

The Coordinator of the Social Science Program advises Social Science majors and minors who do not plan to teach. The Coordinator of Education Sequences in Social Science advises those undergraduate and degreed students who seek certification for teaching. In addition, these students should contact the appropriate advisor in the College of Education.

The major emphases and minors in social science allow for the design of individualized concentrations that cross traditional departmental lines. Each concentration has different course requirements. Therefore, students must consult with their major or minor advisor before entering a program of study in social science in order to work out specific contracts. Contracts must be signed at least one calendar year before expected graduation.

UNDERGRADUATE PROGRAMS

Major in Social Science for the Bachelor of Arts Degree

Liberal Arts Emphasis

Required Courses:

Students admitted as freshmen or sophomores:

SSCI-101 Introduction to the Social Sciences.....	3 cr.
SSCI-111 Social Science Information Resources and Library Skills: Basic Variant.....	3 cr.

Students admitted as juniors or seniors:

SSCI-301 Foundations of Scientific Inquiry in the Social Sciences.....	3 cr.
SSCI-311 Social Science Information Resources and Library Skills: Advanced Variant.....	3 cr.

Electives	30 cr.
Total	36 cr.

Electives are chosen from a list of designated courses offered by the social science departments and need the advisor's approval. No more than 18 credit hours nor less than 6 should be taken from any one discipline. Students may either specialize in a particular interdisciplinary area or elect a general studies option in which several disciplines are surveyed.

NOTE: At least 18 of the credit hours applied toward the major must be taken at Northeastern.

Education Emphasis

This major emphasis is designed for students who plan to teach social studies in secondary schools.

Required Courses:

6 courses in one discipline (preferably history).....18 cr.

If history is the chosen discipline, the required courses are to include:

HIST-111 Currents in Western Civilization	3 cr.
HIST-112 Currents in Western Civilization	3 cr.
HIST-214 United States History, 1607-1877	3 cr.
HIST-215 United States History, 1877-Present	3 cr.

6 courses in a second discipline (or 3 courses in each of two disciplines).....18 cr.
Total 36 cr.

Additional courses as needed to prepare for the state certification examination (see below).

Students wishing to be certified for teaching one of the social science areas in secondary schools should consult the Secondary Education section of this catalog. Because certification requirements are subject to change, students are cautioned to consult the Coordinator of Education Sequences in Social Science as well as their advisor in the College of Education from time to time. The state certification examination in social science currently includes material from all seven of the following disciplines: anthropology, economics, geography, history, political science, psychology, and sociology. One third of the examination is history. Students should have at least one course in geography (see coordinator for list) and PSCI-AMER-216 American National Government (see requirements in section for College of Education). They must also take one course in "Non-Western or Third World Culture." These courses, or those for history listed above, may count for the general education requirement, and/or for the major. (State certification requirements stipulate that students who wish to teach American history at the secondary level must complete at least 8 semester hours in United States history; those teaching world history must have at least 5 semester hours in United States history and 16 hours in history total. For psychology the requirement is 20 hours.) Because the student's major is in social science and the education courses are a professional sequence, the student does not need a minor for graduation.

Minor in Social Science (24 cr. hrs.)

Required Courses:

Students admitted as freshmen or sophomores:

SSCI-101 Introduction to the Social Sciences.....	3 cr.
SSCI-111 Social Science Information Resources and Library Skills: Basic Variant.....	3 cr.

Students admitted as juniors or seniors:

SSCI-301 Foundations of Scientific Inquiry in the Social Sciences.....	3 cr.
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SSCI-311 Social Science Information Resources and Library Skills: Advanced Variant	3 cr.
Electives	18 cr.
Total	24 cr.

Electives are chosen from a list of designated courses offered by the social science departments and need the advisor's approval. No more than 12 credit hours nor less than 6 should be taken from any one discipline. Students may either specialize in a particular interdisciplinary area or elect a general studies option in which two or more disciplines are surveyed.

NOTE: At least 12 credit hours applied toward the minor must be taken at Northeastern.

Minor in Social Science for the Bachelor of Arts Degree in Elementary Education

Required Courses:

SSCI-325 Interdisciplinary Seminar for Elementary Social Science Teachers.....	3 cr.
HIST-214 United States History, 1607-1877	3 cr.
HIST-215 United States History, 1877-Present.....	3 cr.

6 credits in geography, to be chosen in consultation with the advisor from the following:
G&ES-104, G&ES-105, G&ES-150, G&ES-212, G&ES-213, G&ES-302, G&ES-305, G&ES-311, G&ES-314, G&ES-317, and G&ES-346.....6 cr.

9 credits of electives, to be chosen in consultation with the advisor, of which at least 3 must be in one of the following fields: anthropology, economics, political science, social science, or sociology.....9 cr.
Total 24 cr.

NOTE: Students must have one course in "Non-Western or Third World Culture." They must also take PSCI-AMER-216 American National Government. (See requirements listed under College of Education.) These requirements may be included among the above requirements for the minor, if desired. Students must also be sure that, in addition to SSCI-325, they have two more 300-level courses in one or more of the social sciences.

For a complete description of the degree program in Elementary Education, see the Elementary Education section of this catalog.

NOTE: SSCI-prefix courses only are listed below. Lists of designated courses in the various social science disciplines are available from the appropriate advisor.

COURSE OFFERINGS

SSCI-101 Introduction to the Social Sciences, 3 cr. A foundation for further studies in the social sciences with

emphasis on the elements of scientific thinking and their importance for the social sciences.

SSCI-111 Social Science Information Resources and Library Skills: Basic Variant, 3 cr. Introduction to the nature and use of library-based social science information resources. Working under the direction of a library faculty specialist in social science information systems, each student is introduced to available social science information resources, and methods of accessing and using them.

SSCI-301 Foundations of Scientific Inquiry in the Social Sciences, 3 cr. Examination of the foundations of scientific inquiry and their importance for the social sciences. Selected issues surrounding the nature and methodology of the sciences are considered as they relate to the foundations of scientific knowledge in the social sciences. *Prereq.:* junior, senior, or graduate standing, and signed consent of instructor.

SSCI-311 Social Science Information Resources and Library Skills: Advanced Variant, 3 cr. Introduction to social science information systems, resources, and research methodology. Practice in accessing and using library-based information resources. *Prereq.:* junior, senior, or graduate standing, and signed consent of instructor.

SSCI-321 Seminar in Social Science, 3 cr. Class and individualized studies in various interdisciplinary fields of the Social Science Program. A research report is required. Consult the schedule of classes for particular topics. *Prereq.:* signed consent of instructor.

SSCI-322 Independent Study in Social Science, 3 cr. Independent individual study of selected interdisciplinary topics in social science selected in consultation with an appropriate faculty specialist and the student's program advisor. Restricted to advanced undergraduate or graduate majors in social science and in related interdisciplinary fields. *Prereq.:* signed consent of instructor and program coordinator.

SSCI-325 Interdisciplinary Seminar for Elementary Social Science Teachers, 3 cr. Investigation of the interdisciplinary nature of selected problems. The laboratory component of the course focuses on the development of interdisciplinary instructional materials from each of the social sciences.

Prereq.: completion of 18 credit hours in social sciences.

SSCI-390 Field Experiences, 3 cr. Placement in a government agency, political office, non-profit organization or a related business organization for 100 hours a term. Opportunity for testing classroom concepts and theories, career exploration, and the development of problem solving, research, and social skills. Six hours of preparatory seminar meetings are held during the first two weeks of the trimester, followed by two hours of seminar meetings during the rest of the term. Individual contact with instructor bi-weekly. *Prereq.:* junior or senior standing and signed consent of instructor and program coordinator.

SSCI-391 Internship I, 6 cr. (See description for SSCI-390.) Hours in placement increased to 16 hours per week, 200 hours a term.) *Prereq.:* junior or senior standing and signed consent of instructor and program coordinator.

SSCI-392 Internship II, 6 cr. (See description for SSCI-390.) *Prereq.:* junior or senior standing and signed consent of instructor and program coordinator.

SSCI-401 Independent Study in Social Science, 1 cr. Intensive directed reading and research in selected subjects of an interdisciplinary nature in the social sciences. *Prereq.:* admission to graduate program and 12 hours in social science.

SSCI-402 Independent Study in Social Science, 2 cr. (See SSCI-401 for description.)

SSCI-403 Independent Study in Social Science, 3 cr. (See SSCI-401 for description.)

SSCI-414 Scope and Methods of the Social Sciences, 3 cr. An examination of selected problems in the epistemology and methodology of the social sciences as these relate to the requirements for scientific inquiry in these fields. Emphasis on problems in theory construction, interpretation of multivariate data, evaluation of alternative research strategies, and the sociology of knowledge, as these affect the scope, methods, and objectivity of social science research. *Prereq.:* graduate standing.

SSCI-415 Advanced Interdisciplinary Study in the Social Sciences, 3 cr. Tutorial to help students prepare a

proposal for their research paper or thesis. *Prereq.:* graduate standing, admission to the Master of Arts Social Science program, and SSCI-414 or signed consent of the program coordinator.

SSCI-427 Research Seminar: Social Science, 3 cr. Preparation of a research paper on an interdisciplinary topic in the social sciences. Individualized instruction. *Prereq.:* graduate standing and completion of all other requirements for the Master of Arts in Social Science and/or consent of program coordinator.

SSCI-428 Seminar in Social Science, 3 cr. Seminar on a selected interdisciplinary topic of concern to contemporary social science. May be repeated for credit in sections with different subtitles. Consult the Schedule of Classes for specific topics. *Prereq.:* graduate standing and 12 credit hours in social science, half of which is 400-level work.

SSCI-431 Thesis Seminar: Social Science, 6 cr. Guidance for students conducting research and preparation of a thesis to fulfill the requirements for the Master of Arts in Social Science. Individualized instruction. *Prereq.:* acceptance to master's degree candidacy in social science.

UNIVERSITY HONORS PROGRAM

Mohan K. Sood, Ph.D., Professor of Earth Science, Coordinator

The University Honors Program, which is open to students in all disciplines, provides an expanded educational experience for academically talented students willing to challenge their academic and intellectual abilities by attending Honors courses, seminars, and colloquia and engaging in independent study, research, or creative work.

The small size of Honors classes promotes effective interaction among students and between students and faculty creating an intensive and stimulating learning experience. Successful completion of the Program offers students an added advantage when seeking employment or admission to professional and graduate schools.

A limited number of scholarships and tuition waivers are awarded to students on the basis of academic merit. Detailed information on all aspects of the Program is available from the University Honors Program Coordinator.

The University Honors Program is composed of two independent tiers: Level I for freshmen and sophomores, and Level II for juniors and seniors.

Level I Honors Program

Requirements for Admission:

Entering Freshmen: Minimum composite Enhanced ACT score of 26 or, class rank in the upper 10 percent and minimum composite Enhanced ACT score of 23.

Two letters of recommendation from teachers or counselors.

Transfer Students: Minimum cumulative GPA of 3.25 (based on a 4.0 scale) in transferable courses.

Two letters of recommendation from instructors or permission of the University Honors Program Coordinator.

Enrolled Students: Minimum GPA of 3.25; between 15 and 59 hours earned.

Two letters of recommendation from instructors or permission of the University Honors Program Coordinator.

Requirements for the Program:

The Level I Honors Program requires completion of 21 credit hours distributed among general education courses offered in Honors sections.

Students receive a Level I Honors Certificate if they have completed the required Honors coursework with a minimum GPA of 3.25, have completed at least 60 credit hours with a minimum GPA of 3.25, and have passed the English Competency Exam.

Level II Honors Program

Requirements for Admission:

Completion of Level I Honors Program, or

Junior standing with cumulative GPA of 3.25, or

Satisfactory participation in an Honors Program at another 4-year institution, or

AA degree from a 2-year junior or community college with a minimum GPA of 3.25 (based on a 4.0 scale.)

Requirements for the Program:

HNRS-397 Honors Colloquium.....	3 cr.
HNRS-398 Honors Seminar	3 cr.
HNRS-399 Honors Thesis/Project	3 cr.
Honors Electives in the major	6 cr.
Total	15 cr.

Students receive a Level II Honors Certificate if they have completed the required Honors course work with a minimum GPA of 4.25, have completed the University course requirements for graduation with a minimum cumulative GPA of 4.25, and have passed the English Competency Exam. A designation of Honors Scholar will also be imprinted on the diploma.

COURSE OFFERINGS

HNRS-397 Honors Colloquium, 3 cr. Specialized and intensive investigation of topics in broadly defined areas of issues of current interest; readings, discussions, guest lecture. A paper and oral presentation are required. *Prereq.:* consent of the University Honors Program Coordinator.

HNRS-398 Honors Seminar, 3 cr. Specialized and intensive investigation of a topic in narrowly defined areas, such as Fine Arts, Sciences, etc. A paper and oral presentation are required. *Prereq.:* consent of the University Honors Program Coordinator.

HNRS-399 Honors Thesis/Project, 3 cr. Guidance of students conducting research or preparing a creative work, usually relevant to their major field, to fulfill the requirements of the Level II Honors Program. *Prereq.:* consent of the University Honors Program Coordinator.

HONORS ELECTIVES: Students may earn Honors credit in their major for courses not offered in Honors sections by attending a regular course and completing additional work specified in an Honors Learning Agreement between the student, the instructor, and the University Honors Program Coordinator. Consult the University Honors Program Coordinator for further information.

HONOR SOCIETIES

Membership in an honor society promotes scholarly communication and recognizes superior scholarship and/or leadership achievement. Eleven honor societies currently have

chapters at Northeastern Illinois University. Many are member societies of the Association of College Honor Societies.

The honor societies at Northeastern Illinois University are listed alphabetically, by discipline:

All Academic Disciplines: Alpha Chi/Illinois Zeta Chapter
Purpose: To recognize scholarship and advance the University's commitment to academic excellence
Contact: University Honors Program, Dr. Mohan K. Sood

Biology: Beta Beta Beta/Omega Xi Chapter; Purpose: To improve the understanding and appreciation of biology
Contact: Biology Department, Dr. George Diepstra

Chemistry: Iota Sigma Pi/Aurum Iodide Chapter (for women in Chemistry)
Purpose: To grant recognition to women who have demonstrated superior scholastic achievement and high professional competence
Contact: Chemistry Department

Economics: Omicron Delta Epsilon/Sigma Chapter of Illinois
Purpose: To recognize scholastic attainment and honor outstanding achievements in economics
Contact: Economics Department, Dr. Audie Brewton

English: Sigma Tau Delta/Psi Upsilon Chapter
Purpose: To brevet distinction upon undergraduates, graduates and scholars in academia as well as upon professional writers who have realized accomplishments in linguistics or literary realms of the English language.
Contact: English Department, Dr. Robert Paine.

French: Pi Delta Phi, Iota Epsilon Chapter
Purpose: To recognize outstanding scholarship in French language and literature
Contact: Foreign Languages and Literatures Department, Ms. Dorette Klein

History: Phi Alpha Theta/Pi Gamma Chapter
Purpose: To recognize and promote scholarship in history
Contact: History Department, Dr. Joseph Morton

Italian: Gamma Kappa Alpha
Purpose: To recognize outstanding scholastic performance in Italian language and literature, and foster greater interest and understanding of Italian culture
Contact: Foreign Languages and Literatures Department, Dr. Batista Galassi

Political Science: Pi Sigma Alpha/Theta Lambda Chapter
Purpose: To advance and diffuse knowledge and interest in political science
Contact: Political Science Department, Dr. Valerie Simms

Psychology: Psi Chi
Purpose: To advance the science of psychology, stimulate scholarship and research
Contact: Psychology Department, Mr. Arnold Gordon

Spanish: Sigma Delta Pi, Mu Xi Chapter
Purpose: To work for the benefit of the Spanish language and the Hispanic culture
Contact: Foreign Languages and Literatures Department, Dr. Valeska Najera

Further information about the honor societies, including specific requirements, inductions, membership fees and activities can be obtained from the department and/or sponsor.

OFFICE OF CONTINUING EDUCATION AND EXTENSION

Field Experience Resource Center

The Field Experience Resource Center functions as a clearinghouse for information related to sponsored experiential learning (work/learning experiences, such as internships, cooperative education, and practica).

The resource center serves faculty, staff, students and community agencies by providing a library with materials related to field-experience education, offering support services to individuals and groups (consultation, workshops, seminars, etc.), and developing public-relations materials (i.e., a brochure, directory and newsletter).

Additionally, this office houses the Cooperative Education Program and the Minority Internship Program.

Extension Program

The Extension Program at Northeastern offers a range of classes at off-campus locations in the university service area, including courses and workshops for which graduate or undergraduate credit can be earned.

Community Listeners Program

Community Listeners is a program designed to allow members of the community to sit in on regularly scheduled campus classes at no cost and for no credit; in addition, listeners receive library privileges. There are no specific qualifications for this program, and participation depends on the availability of space.

FACULTY

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