

1986

Northeastern Illinois University 1986-88

Northeastern Illinois University

Follow this and additional works at: <https://neiudc.neiu.edu/catalogs>

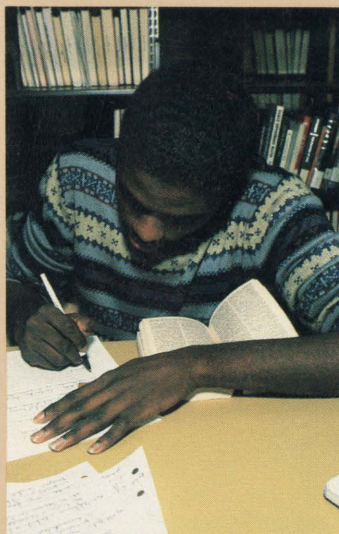
Recommended Citation

Northeastern Illinois University, "Northeastern Illinois University 1986-88" (1986). *Course Catalogs*. 30.
<https://neiudc.neiu.edu/catalogs/30>

This Book is brought to you for free and open access by the NEIU Archives at NEIU Digital Commons. It has been accepted for inclusion in Course Catalogs by an authorized administrator of NEIU Digital Commons. For more information, please contact neiudc@neiu.edu.



1986-88



*Northeastern
Illinois University*

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, handicap, national origin, race, religion, sex, or veteran status.

This issue of the
Northeastern Illinois University Catalog
is for the academic period
1986-1988.

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.

**University Catalog
1986-88**

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

**BOARD OF GOVERNORS
OF STATE COLLEGES
AND UNIVERSITIES**

James L. Althoff, McHenry
Vice Chairperson
Dominick J. Bufalino, Norwood Park
Township
Lowell B. Fisher, Fairview
Nancy Froelich, Hudson
Chairperson
William E. Hoffee, Fairfield
Evelyn Kaufman, LaSalle,
Robert J. Ruiz, Chicago
Wilma J. Sutton, Chicago
D. Ray Wilson, Elgin

**Non-Voting Members
One Student From Each Institution**

Eddie Kemp
Chicago State University
Michael Ashack
Eastern Illinois University
Larry Lulay
Governors State University
Tom Shaw
Northeastern Illinois University
Stephen Eckhart
Western Illinois University

OFFICERS OF THE UNIVERSITY

Gordon H. Lamb, President
John Cownie, Provost
Donn H. Bichsel, Vice-President for
Development and Public Affairs
Daniel C. Kielson, Vice-President for
Student Affairs
(vacant), Vice-President
for Administrative Affairs

TABLE OF CONTENTS

Board of Governors of State Colleges and Universities i

Officers of the University..... i

The University 1

A Guide to Reading This Catalog 5

Admissions 6

Residency Status 11

Statement of Fees 13

Office of Financial Aid 13

Policy on Release of Information..... 16

General Education Program 18

University Honors Program..... 20

Academic Regulations..... 20

Registration and Records 23

Graduation 24

Instructional Support Services..... 25

Student Life..... 26

The Graduate College..... 27

 Admission Requirements 27

 Master's Degrees Programs 29

College of Arts and Sciences..... 31

 Anthropology..... 32

 Art..... 34

 Asian Studies..... 38

 Biology..... 38

 Chemistry..... 45

 Criminal Justice..... 49

 Earth Science..... 50

 Economics..... 54

 English..... 56

 English Language Program..... 62

 Foreign Languages and Literatures 63

 Geography and Environmental Studies..... 67

 Greek Studies..... 72

 History..... 72

 Information Science 77

 International/Intercultural Studies 80

 Judaic Studies..... 81

 Linguistics 84

 Mathematics..... 87

 Music..... 91

 Natural Science..... 100

Philosophy..... 100

Physics 101

Political Science 105

Psychology 110

Social Science 115

Social Work 117

Sociology 119

Speech and Performing Arts..... 121

College of Business and Management 127

 Accounting, Business Law and Finance 129

 General Business Administration..... 132

 Management 133

 Marketing..... 136

College of Education 139

 Chicago Teachers' Center 142

 Clinical Experiences and Student Teaching 142

 Bilingual/Bicultural Education 144

 Counselor Education 144

 Curriculum and Instruction 148

 Early Childhood Education 149

 Educational Foundations..... 155

 Elementary Education..... 160

 Health, Physical Education, Recreation and Athletics 163

 Human Resource Development 172

 Inner City Studies Education..... 175

 Instructional Media 177

 Language Arts..... 179

 Reading..... 180

 Secondary Education..... 183

 Special Education 187

Center for Program Development 195

 Board of Governors Bachelor of Arts Program 195

 Kaskaskia Plan 196

 University Without Walls..... 196

 Program for Interdisciplinary Education and Professional Development..... 196

 Women's Studies Program 196

 El Centro (Educational Resource Center) 198

 Field and Continuing Education..... 199

Faculty 200

Calendar 211

Index 213

THE UNIVERSITY

Northeastern Illinois University is a fully accredited public, urban, commuter 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 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.

ACADEMIC YEAR

The university's annual calendar consists of three 16-week trimesters: fall, winter and spring-summer. The spring-summer trimester, extending from early May through mid-August, includes two separate eight-week terms.

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.

STUDENT BODY

Currently, 93% of our students are from Cook County. They differ in age, cultural background, and interests, but they share a single purpose—developing their knowledge and skill level. At Northeastern, first semester students as well as transfer students will find challenge, special resources and new ideas.

Our faculty and students draw on resources in the immediate neighborhood as well as the Chicago metropolitan area to enrich their learning experiences. In return, the university itself is a resource for local groups, providing programs such as continuing education, day care, counseling, listeners program, access to the library and other referral and social services. Such public service

efforts are directed toward more effective problem solving today—and for the future.

It's the sensitivity to changing societal needs that keeps a university continually searching for better ways to accomplish its educational mission. It is through the interaction of an outstanding faculty and a diverse, inquisitive student population, that a challenging and stimulating environment is created which produces new ideas and better solutions to old problems.

OFF-CAMPUS EXPERIENCES

Northeastern Illinois University provides opportunities for students to gain field experience in many areas of study. In addition to student teaching (a requirement in the teacher education program) education majors observe and tutor in the Chicago and suburban public school systems. Educational field center programs, established in the Westtown and South Side communities, are designed to increase community access to higher education, develop local leadership, and encourage cooperative efforts with educational and social agencies to identify and address community concerns.

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 outstanding university that it is today. Over the years, the name of the school as been changed many times; the Chicago Normal School (1869), Chicago Teachers College (1910), Chicago Normal College (1913), and back to Chicago Teachers College (1938).

In 1957 a second campus was opened: Chicago Teachers College North, which was moved to the current campus site in 1961. Chicago Teachers College South remained in Englewood.

In 1961 our total enrollment was 1,348 students, and we offered the bachelor of arts and bachelor of science degree although the major concentration was primarily in education. Throughout the 1960's our enrollment increased, our programs were expanded, and our name continued to change: to Illinois Teachers College-Chicago North (1965), Northeastern Illinois State College (1967), and finally in 1971, with a total enrollment of approximately 7,000, we became Northeastern Illinois University.

From the beginning, our university has taken innovative approaches to learning and has focused on the interaction of city life and the

individual learning process. We took adult education to the neighborhoods through our Center for Inner City Studies and our Extension and Continuing Education programs.

The Center for Program Development was organized in 1970 to pilot non-traditional programs. This program includes such courses of study as the Kaskaskia Plan, a non-traditional degree program which offers learning opportunities unlike those in the traditional academic curriculum. The University Without Walls program and the Board of Governors Bachelor of Arts program offer older students opportunities to earn college credit for a variety of non-traditional educational activities.

We have also pioneered programs for students seeking internships and apprenticeships, and we continue to offer a wide variety of field experience opportunities.

The past decade was a period of rapid growth at Northeastern. New construction since 1971 includes the 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 500,000 volumes.

In 1973, with the acquisition of adjoining property, our campus grew to 67 acres. Our 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 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.

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 Program Development. Instructional support services are provided by the Library, Learning Services, Admissions and Records, Academic Computing, Academic Advisement Center, and the Tutoring Center.

In addition, the Office of Academic Affairs is administratively responsible for the area of Athletics, Intramurals, and Recreation and 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, Business Services, Institutional Studies and Planning, Personnel, Physical Facilities, Internal Audit, and University Computer Services.

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, Duplicating Services, Mail Services, Sponsored Programs, Telecommunications, and University Relations. Activities of the Northeastern Illinois University Foundation and the Alumni Association are also coordinated by this area.

STUDENT AFFAIRS

The Student Affairs division provides services and programs designed to assist each student in reaching his/her goals in education, in career planning and in personal development. Students are encouraged to use the services and become familiar with the programs offered through the following offices:

Center for Student Development	Special Programs
Child Care Center	Student Activities
Commuter Center	University Events
Financial Aid	Women's Services
Health Service	

Center for Student Development

The purpose of the Center for Student Development is to help students take charge of and responsibility for their lives by providing a wide range of programs, services, and experiences to help them:

1. Discover who they are;
2. Decide how they want to grow and change;
3. Learn new skills, approaches, and strategies to help them get there; and
4. Apply these new learnings and skills to everyday life situations.

Center offices are open five days and three evenings a week and collectively provide the following services and programs: (1) orientation programs for new students; (2) counseling; (3) testing and assessment; (4) educational planning; (5) Judaic Studies Program advising; (6) academic probation recovery assistance; (7) career planning; (8) job placement; (9) career resource library; (10) mediation service; (11) special services for international students and veterans; (12) personal growth skill building workshops; (13) campus peer helper program.

Career Development and Placement Office

The Career Development and Placement Office assists Northeastern students and alumni in two critical tasks: (1) choosing a career direction based on good information and accurate self-perception; and (2) seeking placement in a job that is appropriate, satisfying and related to career choice.

A special handout suggesting a desirable timetable for the accomplishment of these tasks while at Northeastern is available in the CD&P Office, B-117. Freshmen and transfer students are urged to obtain a copy to begin their planning.

The career decision-making process is supported by outstanding resources available in CD&P's Career Resources Library, housed in B-117. They include one-to-one career advisement from professional staff, instructional videos, a computer-based career

guidance system, books, magazines, and timely articles. Help in selecting/using these resources is cheerfully extended.

Senior or alumni job seekers are offered specialized services in the form of resume writing and interview skills workshop, opportunities to be interviewed on campus by company/agency recruiters, computerized job matching, bi-monthly listings of job openings in the Chicago area, access to UNI and Chicago-area job fairs, and continually updated job market reports and salary surveys.

Education majors are invited, in their student teaching trimester, to attend seminars on placement opportunities in teaching and receive detailed instructions for setting up professional teacher credential files. All first-semester seniors are expected to register for placement services.

Counseling Office

Commuter students often have to balance the three worlds of school, work, and home. These three obligations can make heavy and sometimes conflicting demands on time and priorities, and sorting them out is not easy. It is during times when the demands of many obligations seem too great, that counseling can offer a helping hand.

Counseling is available to students (1) on an individual basis; (2) as part of a counseling group (working together with other students who are striving to understand similar sorts of problems); or (3) as a couple (working with a spouse or partner and a counselor to focus on issues important to the relationship).

Students may see a counselor on a "walk-in" basis or may make an appointment to see a particular person in Room B-115.

The Counseling Office also offers a variety of testing and assessment services to help students learn more about themselves and their needs. These include career interest testing, psychological testing, and a Developmental Assessment - to help students measure progress in areas of personal growth typically encountered while in college.

International Student Services

The Office of International Student Services, Room B-113, provides a variety of services designed to assist international students in a successful academic, personal, and cultural transition to the university environment and to the Chicago area. In addition to advising and counseling, the office sponsors an on-going orientation program for entering and continuing international students including special workshops, rap sessions, and supportive group activities both on and off campus. These meetings promote a primary goal for all international students—to acclimate them to the university and the city of Chicago. The international student advisor also serves as the liaison between students and the Immigration and Naturalization Service. Students are assisted in understanding and complying with the regulations and procedures governing extension and review of visas, status changes, transfers to other institutions, employment, and travel outside of the United States.

Student Employment Office

Northeastern students in need of 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. Approximately 1300 placements are made each year.

Jobs are available to help students meet expenses, gain career related experience, or both. Specific opportunities are posted on bulletin boards in corridors adjacent to the Student Employment Office.

Certain jobs, such as those provided by the College Work Study program, are based on need demonstrated through a completed Financial Aid application; others are open to all students, regardless of their financial circumstances.

Students seeking jobs in a given trimester should apply as early in that term as possible.

Veterans' Affairs

The Veterans' Affairs Office, B-113, provides the following assistance to veterans of the Armed Forces: (1) benefits information; (2) academic counseling and advising; (3) information about certification procedures and assistance with the completion of forms; (4) assistance with registration; (5) referrals off and on campus; (6) advocacy for the needs and concerns of UNI veterans.

Through this office, veterans have contact with the local Veterans' Administration for clarification of problems concerning their status and related matters.

Child Care Center

A state licensed child care program, provides services for children (ages 15 months - 5 years) of students, faculty, staff and the community. This program includes kindergarten for the five year old child and an eight week summer session for children ages six to twelve. The center is open 51 weeks each year.

Commuter Center

The Commuter Center provides facilities for: campus organizational meetings, social and recreational events, services such as a cafeteria, bookstore, locker space, typing room and study space. The Student Senate, the Commuter Center Activities Board, student publications, the radio station and other campus clubs also have offices and work space in the Center.

The Commuter Center is the focal point of student life since Northeastern's student body is composed entirely of urban commuters. The Center's programs and facilities are designed to enrich the educational experiences of the university community and provide comfortable surroundings for informal study and relaxation.

Commuter Center Facilities Guide

Main floor:

Alumni Hall (multi-purpose room)
Book Nook (bookstore)
Box Office
Bulletin Boards
Coin-operated Copiers
Coin-operated Lockers
Megaform Seating
Public Telephones
Vending

Lower level:

Cafeteria
Game Room
General Publications Room
Poster Room

- Print (the student newspaper)
- Student Radio Station (WZRD)
- Typing Room
- Vending
- Yearbook

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 and Food Order
- 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

Financial Aid

(See separate section)

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 regular office hours (8 a.m. to 4 p.m. Monday - Friday).

There are no fees for any of the services, tests or literature that is available in the Health Service; nor does the university assume any responsibility for treatment given 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
- a class in CPR, first aid, stop smoking, breast or testicular self-exam
- a return to work clearance
- screening for hypertension, hearing, vision, pregnancy
- a definitive test for strep throat, venereal disease
- assistance with medication identification

or

have special medical needs

then see us in G-138 - Health Service - Extension 3453.

Special Programs

The Office of Special Programs sponsors three on-going programs (Project Success, Proyecto Pa'Lante, and Special 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 primarily 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 and dedicated to recruit, retain and graduate 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 y dedicados al reclutamiento, retenimiento y graduacion de 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 reenforzamiento 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.

Special Services

The Special Services program, funded by the United States Department of Education, is designed to give support services to incoming freshmen. Acceptance into this program is based upon the student's ability to meet one (or in some cases, two) of the following eligibility criteria: low income, physically handicapped, or first generation college student. The services consist of a general orientation, assistance in course selection, personal counseling, academic advising, career development, tutoring, assistance with the completion of financial aid forms and a variety of informative workshops.

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 furnishes 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.

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 Policy* may be obtained in the University Events office.

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.

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 returning students and parents.

A GUIDE TO READING THIS CATALOG

THE ACADEMIC YEAR

The academic year consists of three trimesters of 16 weeks each. The Spring-Summer session includes two separate eight-week terms. A student can complete the requirements for graduation in approximately three years of continuous enrollment.

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 trimester. 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 courses are for graduate students **ONLY**.

NOTE: 300-level courses are considered to be at the graduate level when taken by students who have achieved graduate level status at Northeastern Illinois University. However, 300-level courses which are methods courses, field experiences, or student teaching are not considered to be at the graduate level. In addition, 300-level courses from disciplines or departments which cannot apply to a graduate program are not at the graduate level.

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	

DEFINITIONS OF TERMS USED IN THIS CATALOG

Add/Drop: The process of making certain changes (adding, dropping or changing a course) in a student's schedule of courses at the beginning of a term. This also includes students registering for the first time at the beginning of a term.

Advanced Placement: Course credit or waiver of course prerequisites granted to students who successfully complete Advanced Placement examinations given by the College Entrance Examination Board.

Advance Registration: A procedure which allows eligible students to request classes prior to open registration for the next trimester.

Auditing: To register for and attend a class regularly without completing the work required for credit. No grade points or credit hours are granted for audited courses. Written permission of the instructor is required. Full tuition and fees are assessed.

Core Courses: Courses which are required of all majors in a department which offers a number of major programs or emphases.

Departmental Requirements: Courses required for a major program which are offered by the major department.

Double Majors and "Second Majors": A student who fulfills all requirements for two primary academic majors may choose to receive the degree in either major, with the other being listed as a second major for transcript purposes. A major which is available only as a second major to students who also complete a primary major is denoted in this catalog as a "Second Major." The degree is awarded in the primary major, with the "Second Major" so noted on the transcript. Students graduating with a Double Major will receive only one diploma.

Drop: A procedure which allows a student to delete a course(s) from his schedule before the 10th day of the trimester. This course does not appear on the student's permanent academic record.

Dropped for Poor Scholarship: Dismissal from the university for not meeting academic standards.

Elective: A course that a student chooses to enroll in, as distinguished from a course listed under departmental or university requirements.

Grade Points: The numerical value given to letter grades. "A" is equivalent to 5 points per semester hour, "B" is equivalent to 4 points per semester hour, "C" to 3 points, "D" to 2 points, and "F" to 1 point per semester hour.

Grade Point Average: The scholastic average, computed by dividing the total number of grade points earned, by the total number of semester hours earned.

Hold or Administrative Hold: A restraint order placed on a student's records, indicating that a transcript may be withheld or registration prohibited. The reasons for a hold are: admissions, financial, or academic.

Major: A concentration of related courses generally consisting of 30 to 60 semester hours.

Minor: A concentration of courses generally consisting of 18 to 30 semester hours.

Option: A specific choice open to students within an academic program, e.g., the selection of a thesis or non-thesis option in a graduate program.

Prerequisite: A requirement, usually completion of another course, which must be met before a student can register for a course.

Proficiency Examination: A way for a student to receive course credit for individual or special study. Proficiency examinations are usually given by academic departments.

Readmission: Admission procedure followed by students in undergraduate degree programs who were previously enrolled in the university, but whose attendance was interrupted by 2 or more consecutive trimesters.

Reinstatement: Admission procedure followed by a student who was formerly enrolled in the university but was academically dismissed.

Second Bachelor's Degree: A student completes a minimum of 30 additional credit hours at Northeastern beyond those

earned prior to the award of the first bachelor's degree, and fulfills all university-wide and program requirements for the second bachelor's degree.

Sequence: An academic program that is a subset of a major academic field of study and which has specific, unique curriculum requirements that may include both required courses and electives.

Student-at-Large: A student who is not working in a degree-granting program. An undergraduate student-at-large must reappear prior to each trimester while under this classification.

Term: An academic trimester or spring-summer session.

Transcript: A copy of a student's permanent academic record.

Unit of Credit: Credits are measured in semester (also referred to as trimester) hours, and one semester hour is generally equivalent to one 50 minute lecture or discussion, or two laboratory periods, per week for a trimester.

Withdrawal: A procedure which allows a student to withdraw from a course(s) after the 10th day through the end of the 11th week of a trimester. This course will appear on the student's permanent record with a grade of "W".

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 an accredited high school or have a passing grade on the G.E.D. ACT scores are required for all incoming freshmen unless they are 21 years of age or older. Admission is based on high school rank in class and supporting ACT scores. To be admitted, students must rank in the top half of their graduating class or have a minimum ACT composite score of 17.	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 1988/90

Fall 1988 BOG Subject Requirements

In addition to meeting the above 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 Science 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, and/or further work in the above areas.

Fall 1990 IBHE Subject Requirements

For freshmen entering in the Fall of 1990 the following 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

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 freshmen 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.

1. Submit Northeastern undergraduate application form.
2. Request that an official transcript be sent showing graduation from the college or university which awarded the previous degree.
3. 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
<p>Readmission</p> <p>Any former Northeastern undergraduate who has not attended for two consecutive trimesters 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.</p> <p>NOTE: Undergraduate students who reenter the university after an absence of two or more full trimesters 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.</p>	<p>Good standing at the time of last attendance at Northeastern.</p> <p>Students who have enrolled at other institutions since leaving Northeastern must have an overall "C" average and be in good standing at those institutions.</p>	<ol style="list-style-type: none"> 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.
<p>International Students</p> <p>Students from other countries who carry an F or J visa.</p> <p>International students are eligible for admission to degree programs only and may not be admitted as students at large.</p> <p>NOTE: Students must complete their files two months prior to the beginning of classes in order to insure proper processing of I-20 forms.</p> <p>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 any visa be eligible for resident tuition assessment.</p>	<p>Satisfactory educational record.</p> <p>Satisfactory score on TOEFL*.</p> <p>Evidence of financial support to meet financial needs during their enrollment at Northeastern as reflected on Northeastern's financial statement.</p> <p>The TOEFL* is required of all students who attended foreign universities, including resident aliens.</p> <p>*Test of English as a Foreign Language</p>	<p>In addition to the above application procedures, international students must also submit:</p> <ol style="list-style-type: none"> 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.

Students who are out-of-status will not be considered for admission.

CLASSIFICATION AND DEFINITION	REQUIREMENTS FOR ADMISSIONS	HOW TO APPLY FOR ADMISSION
<p>Student-at-Large with Bachelor's Degree</p> <p>Students with bachelors or masters degrees who wish to enroll at Northeastern as non-degree candidates.</p> <p>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.</p>	<p>Evidence of graduation from an accredited college or university.</p> <p>NOTE: Students who have graduated from Northeastern are eligible to register and need not submit an application.</p>	<ol style="list-style-type: none"> 1. Submit admissions application form. 2. Submit one of the following documents verifying college graduation: photocopy of diploma, Illinois State teacher certification, Chicago Board of Education card, or official college transcript indicating receipt of a bachelor's or higher degree. 3. Resident Aliens must submit a photocopy of both sides of their Resident Alien card.
<p>Student-at-Large Without Degree</p> <p>Undergraduate students working toward a baccalaureate degree at another college or university. Permission to register as an undergraduate student-at-large is valid for one term only.</p>	<p>The applicant must have an overall "C" average in all course work attempted and be in good academic standing at the last institution attended. Students must reapply each term that they wish to enroll under this classification.</p>	<ol style="list-style-type: none"> 1. Submit application for admission. 2. Submit official college transcript or letter of good standing from the last college attended full-time. 3. NOTE: This application deadline is subject to early closing should regular undergraduate student enrollment become restricted.
<p>Veterans</p> <p>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.</p>		

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 trimester-equivalent basis, credit shown on official transcripts from

other accredited institutions according to the following guidelines:

1. For admission purposes, **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 as 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.

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) 567-3525/3526 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 credited, 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.

College of Arts and Sciences: Students wishing to pursue majors in the College of Arts and Sciences should make application directly to the intended department. The required "Request for Assignment to or Change of Academic Major" form is available in all department offices.

College of Education: All students planning to apply for teacher certification, regardless of the academic area of concentration, must submit the "Application for Admission to the College of Education" after they have earned 30 credit hours (12 credit hours at Northeastern Illinois University for transfer students) with a minimum 3.50 cumulative grade point average. Application materials and information are available in the Office of the Dean (4004). All education students must apply and be admitted to the College of Education in order to be eligible for student teaching. See the College of Education section of this catalog.

College of Business and Management: See the College of Business and Management section of this catalog.

Center for Program Development: Students pursuing majors within the Center for Program Development are subject to specific college requirements should they pursue an academic major within the College of Arts and Sciences, College of Education or the College of Business and Management.

Students who wish to change majors must complete the "Request for Assignment to or Change of Academic Major" form available in department offices.

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:

- That of the person's parents, if they are living together, or living parent, if one is dead; or
- 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
- 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
- that of the legally appointed guardian of the person if the minor resides with such guardian; or
- 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

- 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.

- 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 and must also meet and comply with all of the other applicable requirements of this regulation 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 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 construed 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 trimester, 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. During the regular 16 week trimester, the final date for a full refund of tuition and refundable fees, less a service charge, or reduced tuition and fees for a reduction in course load, will be the tenth class day after classes begin. The final date for a 50 percent refund for withdrawal from **all** courses, will be the twentieth scheduled class day after classes begin. A service charge will be deducted for processing refunds.

During the eight week term, the final date for a complete refund, less a service charge, is the sixth class day after classes begin. The final date for a 50 percent refund for withdrawal from **all**

courses, will be the eleventh class day after classes begin. A service charge will be deducted.

Health insurance and parking fees are not refundable.

LATE PAYMENT FEE

A late payment fee of \$10.00 will be assessed for payments received after the due date and for a certain prescribed period of time only as listed in the Schedule of Classes. This fee is non-refundable. Payment of a late fee does not guarantee acceptance of the late payment.

MANDATORY STUDENT FEES

Students registered at Northeastern Illinois University pay a variety of fees which are used to support student programs and enhance campus life.

The Student Activity Fee is used to support the operation of the Student Government and programs sponsored by the Commuter Center Activities Board. The fees help pay for lectures, films, concerts, drama, art exhibits, the college newspaper, year-book, poetry magazine, radio station, clubs and organizations, printing the student handbook, the student calendar and other activity brochures, and any other activities or services approved by the Student Government which benefit the student body.

An Athletic Fee completely finances a wide variety of intramural and 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, and office space for student government, media and student activities.

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

OFFICE OF FINANCIAL AID

Northeastern Illinois University makes every effort to extend financial assistance to qualified students who are in need of funds to complete their education. The Office of Financial Aid, located in D-201, 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.

HOW TO APPLY FOR FINANCIAL AID

Applicants who wish to be considered for financial aid must complete the following forms:

Northeastern Illinois University Financial Aid Application
and

ACT—Family Financial Statement (\$6.00 fee)

or

Application for Federal Student Aid

NOTE: All independent students (single or married) must provide a photocopy of their Federal Income Tax Form (IRS 1040 or 1040A) for the preceeding year. All dependent students must provide a photocopy of their own and their parents' Federal Income Tax Form (IRS 1040 or 1040A) for the preceeding year.

Students who have completed their financial aid files on or before May 1, will receive primary consideration for financial aid if they qualify. This deadline applies to all students requesting aid for the Summer, Fall, Winter and Spring terms or any combination thereof.

PROGRAMS	ELIGIBILITY	DESCRIPTION OF PROGRAM	REPAYMENT	OFFICE TO CONTACT
Illinois Monetary Award (ISSC)	(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.	Typically pays tuition and general fees. Recipients must reapply annually.	No repayment obligation.	High school guidance departments or Northeastern's Office of Financial Aid or ISSC, 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 needs 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.
ISSC 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; 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.	Maximum: Academic Year 1984-85: \$1,525. \$762.50 per term for full-time enrollment. Subject to change.	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 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.	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).
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).

Additional information concerning financial assistance and deadlines can be obtained by contacting the financial aid office, 583-4050, extension 2900.

PROGRAMS	ELIGIBILITY	DESCRIPTION OF PROGRAM	REPAYMENT	OFFICE TO CONTACT
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).
National Direct Student Loan (Federal)	(undergraduate and graduate) Enrolled full or part-time. Must be enrolled in a degree program. Must show need.	Maximum \$2,500 aggregate first two years; \$5,000 as 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 (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 year; Undergraduate: \$2,500. Graduate: \$5,000. (Preceding maximum reduced by one-half if student enrolls half-time)	Long-term repayment-no cancellation privilege for teachers. 9 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: \$50.	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

Purpose: 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)
- National Direct Student Loan (NDSL)
- College Work-Study (CWS)
- Illinois Guaranteed Student Loan (IGL)

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

Policy Statement: Students are required to 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. (An award year includes the period from July 1 to June 30.) This requirement applies to all trimesters within the award year even if monies were not received in all of these periods.

Financial Aid recipients of the above-mentioned programs may self-pace their educational objectives within the designated "Maximum Time Frames":

- 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.

Students terminated from financial aid because of the Maximum Time Frame violation, may appeal to the Director of Financial Aid for an extension.

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 (nine credit hours in the fall and winter trimesters; six credit hours in the spring and summer terms).

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.

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, 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. The university has the option to release this information without the student's consent for purposes of acknowledging awards, honors, and achievements earned by students and to public officials (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:

*Center for Program Development	C-525	Dean
Center for Student Development	B-114	Dean
*College of Arts and Sciences	S-158A	Dean
*College of Education	4-044	Dean
Financial Aid	D-201	Director
*Graduate College	4-027	Dean
Special Programs	B-108	Director
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.
- C. Records relating to the physical or mental health of a student are not disclosable, except pursuant to a subpoena or upon request by the Office of the Vice President for Administrative Affairs or the Legal Affairs Office. Requests from these offices will be made to the Director of the Health Service or the Dean of Student Development on University stationery, signed by the requestor, and describing the legitimate need for such records, e.g., the University's need to respond to an insurance claim or legal action. A copy of the records will be delivered to the requestor in an envelope marked "Confidential."

V. Release of Information to Third Parties

- A. Directory information may be released to agencies or persons outside the university 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.

GENERAL EDUCATION PROGRAM

As a metropolitan institution, Northeastern Illinois University has a student body diverse in age, background, preparation, and interest. Despite these differences, most undergraduates view college as the means to an end: entry into a career. The faculty acknowledges this practical concern through offering a variety of career-oriented, as well as traditional liberal arts majors. At the same time, given our rapidly changing world, the faculty is committed to providing all undergraduates with the broadbased knowledge, sensitivities, and skills which it believes will best prepare them not only for involvement in their own lives and in society but also for an uncertain future.

The baccalaureate program at Northeastern is thus designed to educate both generally and specifically. The latter is the province of the major; the former, that of the curriculum as a whole. The goals of the general education requirements include development of knowledge of or competence in the following areas:

1. communication and computational skills;
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 natural, behavioral, and social sciences, the humanities, and the fine arts;
6. use of quantitative methods in the natural, social, and behavioral sciences.

Perhaps as important as providing the tools with which to learn, a university education must attempt to foster in every undergraduate the love of learning. The faculty is therefore committed above all to the concept of lifelong learning for which graduation is truly a beginning.

Students who entered or were readmitted to Northeastern Illinois University in the Fall of 1982 or later must meet the General Education requirements. Students who matriculated before this date and have remained active should follow the basic education requirements as specified in the 1980-82 University Catalog.

The General Education Program requirement consists of 42 credit hours in approved courses distributed among the following five areas as indicated.

DISTRIBUTION AREAS

- FINE ARTS.....2 courses, 6 credit hours
- Art
 - Music
 - Speech and Performing Arts
- HUMANITIES3 courses, 9 credit hours
- English
 - Foreign Languages and Literatures
 - Linguistics
 - Philosophy
- BEHAVIORAL/SOCIAL SCIENCES....4 courses, 12 credit hours
- Anthropology
 - Economics
 - Geography and Environmental Studies
 - History

- Political Science
- Psychology
- Sociology

- NATURAL SCIENCES.....4 courses, 12 credit hours
(one laboratory course must be included)
- Biology
 - Chemistry
 - Earth Science
 - Mathematics (only one course applicable)
 - Physics

- INTERDISCIPLINARY/PROFESSIONAL STUDIES..... one course, 3 credit hours
- Criminal Justice
 - Information Science
 - International/Intercultural Studies
 - Judaic Studies
 - Program for Interdisciplinary Education
 - Social Science
 - Social Work
 - Women's Studies
 - All depts/units in the College of Business and Management
 - All depts/units in the College of Education

Only courses included on the Limited List of Courses (published in the current Schedule of Classes) are applicable towards the general education requirements with the following exceptions:

1. Students with a declared major in one of the departments belonging to the area of Interdisciplinary/Professional Studies have thereby fulfilled the general education requirements in this area.

All other students may use any 6 credit hours in their declared major to fulfill part of the general education requirements in the appropriate distribution area.

Students who declare a major in more than one department may use the allowable number of credit hours in each declared major to fulfill part of the general education requirements.

2. Courses completed elsewhere by students transferring to Northeastern Illinois University may be applied to the general education requirements. All transfer students are provided with an evaluation of their previous work.

No more than two courses may be selected from any one department (including courses transferred to Northeastern Illinois University) in meeting the general education requirements.

ACADEMIC MAJOR

Undergraduate students must complete all requirements in the major of their choice. These requirements are listed in detail in the academic department entries which follow.

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, Medical Technology or Physics satisfies the requirement by means of a required group of cognate courses in other sciences and mathematics.

A student who completes a "first" 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 the "second major" in Business and Management has thereby satisfied the requirement.

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 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.

ELECTIVES

Additional credits must be earned to total a minimum of 120 semester credit hours for graduation.

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.

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 trimester 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 trimester 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 trimester 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 trimester of attendance at Northeastern Illinois University unless they have met this requirement.

UNIVERSITY HONORS PROGRAM

The University Honors Program provides an expanded educational experience for academically talented students as it provides them with the opportunities to broaden and enrich their academic program through Honors classes, seminars, colloquia, independent studies, and research or creative work. The small size of Honors classes encourages effective interaction among the students and with the faculty creating an intensive and stimulating learning experience. Successful completion of the Program offers students an added advantage in seeking employment or admission to professional and graduate schools.

ADMISSION REQUIREMENTS

Level I Honors Program

A. **Entering Freshmen:** Composite ACT score of 25 or better, or class rank in the upper 10 percent and minimum composite ACT score of 22.

Two letters of recommendation from teachers/principal.

B. **Transfer Students:** Minimum cumulative grade point average of 4.25 (based on A = 5.0 scale) in transferable graded courses.

Two letters of recommendation from instructors or permission of the Program Coordinator.

C. **Enrolled Students:** Freshmen and sophomore students enrolled at Northeastern with a minimum grade point average of 4.25 in at least 15 hours of course work at Northeastern.

Two letters of recommendation from instructors or permission of the Program Coordinator.

Level II Honors Program

Students seeking admission to the Level II Honors Program must meet one of the following requirements:

Completion of Level I Honors Program Certification at Northeastern.

Junior standing with cumulative GPA of 4.25.

Satisfactory participation in an Honors Program at another 4-year institution.

AA degree from a 2-year junior or community college with a minimum GPA of 4.25.

ADMISSION PROCEDURE

Students who meet the above requirements are welcome to apply to the Program Coordinator for admission. Students who do not meet the stated requirements for admission but whose academic record shows quality work, may petition the Faculty Advisory Committee, through the Coordinator, for special consideration.

ACADEMIC REQUIREMENTS

The Level I Honors Program requires completion of 21 credit hours of Honors course work at 100 and 200-level. These 21 credit hours will be selected from General Education courses offered as Honors sections.

The Level II Honors Program requires completion of 15 credit hours of course work at the 300-level.

For further information, students should contact the Coordinator of the University Honors Program.

ACADEMIC REGULATIONS

CLASS ATTENDANCE

A student must meet the attendance requirements designated by individual course instructors.

COURSE LOAD

The maximum credit hour load for undergraduate students is 16 credit hours of academic work in the regular sixteen-week trimester and 9 credit hours in the eight-week terms.

The recommended credit hour load per sixteen-week trimester for part-time graduate students engaged in full-time employment is 6 credit hours and 3 credit hours in the eight-week terms. For full-time graduate students, the recommended course load is 12 credit hours per sixteen-week trimester and 6 credit hours in the eight-week terms.

Students may petition the dean of their college to take a course overload. The appropriate forms are available at the Admissions and Records Information Counter. Overload forms have to be filled out clearly and signed by an advisor. There are minimum requirements students must fulfill before they may petition:

Fall and Winter terms:

In order to petition for a 17-18 credit hours load (19 credit hours if a 4 credit hour course is included), students must have a minimum GPA of 3.5.

In order to petition for a 19-21 credit hours load, students must have a minimum GPA of 4.0. In addition they must submit a written statement explaining the **compelling** reason for the petition.

Spring and Summer terms:

In order to petition for a 10-12 credit hours load during an eight week term or a 19-21 credit hours load during the 16 week term, students must have a minimum GPA of 4.0. In addition they must submit a written statement explaining the **compelling** reason for the petition.

NOTE: No student may carry a course overload during the first trimester 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 (16 week term)

Graduate	Undergraduate
9 or more = full-time	12 or more = full-time
6 to 8 = 3/4 time	9 to 11 = 3/4 time
4 to 5 = 1/2 time	6 to 8 = 1/2 time
3 = less than 1/2 time	5 = less than 1/2 time

Enrolled Semester Hours (8 week term)

Graduate	Undergraduate
5 or more = full-time	6 or more = full time
4 = 3/4 time	4 to 5 = 3/4 time
3 = 1/2 time	3 = 1/2 time
2 = less than 1/2 time	2 = less than 1/2 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

Northeastern is on a 5.0 grading scale, i.e., each credit hour of "A" equals 5 grade points; an "A" earned in a 3 credit hour course generates 15 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	Completion of course requirements in an outstanding manner, reflecting a degree of accomplishment that is exceptional. 5
B	Completion of course requirements in an entirely acceptable manner, demonstrating an excellent grasp of the subject matter, and the likelihood of successful completion of further courses in the same area. 4
C	Completion of the course requirements in an acceptable manner, reflecting a basic understanding of the subject matter of the course and the possibility of successful completion of further courses in the same subject area. 3
D	Fulfillment of the minimum performance

	requirements prescribed by the instructor, but not in such a manner that higher level courses in the same area can be recommended. 2
F	Failure to demonstrate acceptable competence in the subject matter of the course, and/or failure to fulfill the requirements of the course. 1
I	Incomplete — Extension of the period of enrollment in a specific course, given at the discretion of the instructor. (See Policy on Incompletes, below.) 0
P	Pass — Credit is awarded, but the grade is not figured into the grade point average. This designation is used in pass/fail courses and some Program for Interdisciplinary Education courses. 0
R	Registered — Excessive absences precluded evaluation. This is a permanent symbol, no points are calculated in grade point average, and the course is not applicable toward graduation. 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 11th week of the trimester, or the sixth week of a Spring or Summer term. 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.

Effective Fall 1979, incompletes assigned must be changed to a regular letter grade no later than one calendar year from the initial recording. If no grade is assigned by the end of this period the incomplete becomes permanent. The time limitation 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, as with the "I" grade, explained above. 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 Center for Program Development work 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 area of concentration.
4. Declaration of the intention to select Pass/Fail Option must be made at on-campus registration 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 grade point average.
6. Pass/Fail grading is not allowed for Tutored Study courses. Pass/Fail for Independent Study is permissible only in designated programs within the Center for Program Development.
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 3.0 or a "C" average. Students must have at least a 3.0 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=5, B=4, C=3, D=2, F=1).

An undergraduate student will be placed on academic probation when his/her cumulative grade point average falls below 3.0 (C). If, in subsequent trimesters, the student earns grades which restore his/her cumulative average to 3.0 or above, he/she will be returned to good standing. If, in subsequent trimesters, the student earns at least a 3.0 average for the term, but does not restore his/her cumulative record to 3.0, he/she will be permitted to continue on academic probation. If, in any subsequent trimester, the student on probation fails to earn a 3.0 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 trimester. 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 **August 1, December 1, or April 1** 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. This committee also considers student appeals for suspension of specific rules for documented reasons, 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 3.0 (C) cumulative grade point average, and have not maintained a term grade point average of 3.0 or better.

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

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 3.0 ("C" average) after completing 4 or more courses at Northeastern and who have not maintained a term GPA of 3.0 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 trimester (regardless of the number of trimesters actually attended.) Good standing or probationary status is reviewed at the end of the fifth consecutive trimester after admission to the program. The term and cumulative grade point average at the end of the sixth trimester 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.

HONORS AND HIGH HONORS

During the fall and winter trimesters, undergraduate students who complete a minimum of 12 semester hours with a grade point average of 4.5 - 5.0 for the term, will receive high honors for the term. Students with grade point averages of 4.0 - 4.4 for the term will receive honors for the term. Students who place a course on pass-fail are not eligible to be placed on the Honors or High Honors list for that term.

Students graduating with baccalaureate degrees who have cumulative grade point averages of 4.5 - 5.0 will graduate with high honors. Students with cumulative grade point averages of 4.0 - 4.4 will graduate with honors.

REGISTRATION AND RECORDS

REGISTRATION PROCEDURES

Currently enrolled students and students admitted or readmitted to the university two months prior to the beginning of a term, except for the July-August eight-week term, are eligible to participate in the advance registration system. This allows students to select 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 of the term. Open and advance registration dates are published in the Schedule of Classes.

Students who do not advance register must 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 credentials, 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 will cost \$2.00 per copy. No fee will be assessed for transcripts sent within the university. **All** transcripts issued directly to the student will have an "issued to student" stamp affixed to the transcript. Each graduating student will be sent one computer produced transcript free of charge at the time of graduation. Emergency one-day service for transcript requests will be available for a fee of \$4.00 per transcript. This fee applies to transcripts sent within the university as well as to outside agencies. Students who require this service will need to contact the Records Office.

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

A \$1.00 fee will be assessed for copies of evaluations and enrollment verifications. No fee will be assessed for evaluations or verifications sent within the university.

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

Students may officially withdraw from courses during the first 11 weeks of a 16-week trimester or during the first six weeks of an eight-week term. Students who withdraw during this period will receive a grade of "W".

Students must complete the appropriate "Change of Registration" form available at the admissions/records 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 withdraw early in the term are eligible to receive a partial refund of tuition. Consult the Schedule of Classes for refund policies and deadline dates.

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.

GRADUATION

UNDERGRADUATE CHECKLIST:

- Total Credits:**
A **minimum** of 120 semester hours total must be earned by every undergraduate student to be eligible to graduate from Northeastern.
- Residency:**
The last 30 consecutive credit hours must be taken at Northeastern.
- General Education Program:**
All undergraduate students entering Northeastern in the Fall term, 1982, or after, must complete the General Education Program requirements.
- Academic Major:**
All undergraduates must satisfy the course and grade point requirements as a part of the major requirements of the department of their choice.
- 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 Program Development, College of Education).
- Grade Point Average:**
To be eligible to graduate, a student must have a minimum 3.0 GPA (overall "C" average). Some academic programs and departments have other specific grade requirements. Check with your academic advisor.
- 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 an appropriate political science course (PSCI-AMER-216; PSCI-AMER-304; PSCI-AMER-305; AMER-310; PSCI-AMER-358; or PSCI-COMP-211).
 No academic credit is given for passing the exam.
- Every undergraduate student must pass the English Language Competence Exam offered regularly through the Language Testing Office.
- Professional Education Requirements:**
Students planning to teach at the elementary level must
 - be admitted to the College of Education, and
 - complete all departmental requirements.
 Students planning to teach at the secondary level must
 - be admitted to the College offering the academic major of their choice, and
 - be admitted to the Teacher Education Program offered through the College of Education.

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:

- A minimum of 85 hours of credit has been earned;
- Senate Bill 195 exam **or** course has been passed;
- Student has been formally accepted by his/her major department;
- 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 15
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 resubmitting all graduation forms.

Only those students who have applied, been accepted for graduation, and successfully completed all requirements by the end of the Winter trimester in April, will be eligible to participate in the May/June commencement ceremony.

Students who have filed applications for June or August will not be eligible to participate in the ceremony until the following year.

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.

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 Bonnie Lucas, the Coordinator of Computing Services for the university.

ADVISING PROGRAM

The University Advising Program provides academic and developmental advising for all undergraduate students who have not yet 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 university advisors until assignment of 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.

LIBRARY

The newest building on campus is the central Library located west of the Science Building. It has four floors totalling over 150,000 square feet and contains approximately 500,000 volumes, 1600 reader stations, and numerous study areas. Special features include study facilities for the handicapped, private study areas for faculty and graduate students, and a classroom for library instruction. In addition, over 600,000 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.

Reference

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 desk on the second floor and at the education reference service desk on the third floor.

Reserve

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

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.

Interlibrary Loan and Database Search Services

Northeastern's library is a member of 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 through the library reference service desk. In addition, through the Chicago Academic Library Council, valid ID cards will allow Northeastern students to check out materials at the following libraries: DePaul, Roosevelt, Illinois Institute of Technology, University of Illinois—Chicago, Chicago State, and Governors State.

The Reference Department offers on-line search services for many computerized databases. A charge for such searches is billed to the user. Appointments for database searches should be made at the reference service desk.

Special Collections

Archives

The library maintains the archives for the university. Historical documents, minutes of councils and committees, and other records that are part of the university's history are organized for research and study. Potential users should ask for information concerning the archives at the reference service desk.

Government Documents

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 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. The collection is located in the education section on the third floor of the main library.

Center for Inner City Studies

The university provides a separate library to support the Inner City Studies program. The collection of over 18,000 books, periodicals, microforms, and other research materials is located at 700 East Oakwood Boulevard.

LEARNING SERVICES

Northeastern offers unusual opportunities to learn and teach through the use of a wide variety of film, television, slide and sound programs, and other audio and visual materials. Such materials are either purchased or rented from national distributors or produced in the university's own campus studios and production centers. Although some departments have specialized media laboratories, the great majority of audio-visual materials, equipment, production studio facilities, and professional help for instructional and administrative activities are provided by the Office of Learning Services. The faculty members, professional civil service staff, and student employees of Learning Services work closely with instructors and their students and administrators in identifying and using communications equipment and materials effectively and efficiently.

THE TUTORIAL CENTER

Housed in the library, the Tutorial Center offers assistance to individuals and groups in limited-list 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.

STUDENT LIFE

ACTIVITIES PROGRAM

Student life at Northeastern is enhanced by an activities program that includes some 80 organizations. Students can participate in various media organizations (yearbook, newspapers, radio station, etc.), art clubs (band, choir, theater, etc.), student government, ethnic organizations, departmentally identified groups, and other special interest groups. An enhancement of the individual student is the anticipated outcome of their involvement in these groups which contribute so much to the diversity and character of the campus.

The Student Government, an important aspect of Student Activities, provides valuable opportunities for students to serve on internal as well as many all-university committees and boards. Student senators and officers invariably are involved in many other aspects of the activities program.

INTERCOLLEGIATE ATHLETICS

Since 1965, intercollegiate athletics at Northeastern have provided an educationally sound athletics 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 current Northeastern identification card.

The program operates under the auspices of the National Association of Intercollegiate Athletics (NAIA). Women compete in volleyball, basketball, softball, and tennis. Men compete in cross country, football, golf, basketball, baseball, and tennis.

The football team is a member of the Illinois Badger Conference; all other teams are members of the Chicagoland Collegiate Conference.

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 type to those of a non-competitive and recreational nature. Recreation activities include swimming, basketball, volleyball, weight training, badminton, table tennis, fencing, slimnastics, tennis, archery, and the century club.

Intramural competition is co-recreational, for men and for women. Co-recreational intramural competition includes badminton, volleyball, swimming, softball, tennis, and table tennis.

Women's intramural competition includes softball, volleyball, swimming, badminton, table tennis, basketball, (3 on 3) and tennis.

Men's intramural competition includes touch football, swimming, basketball, (4 on 4) and (1 on 1), floor hockey, table tennis, softball, and tennis.

ACCREDITATION

The Graduate College is accredited by the North Central Association of Colleges and Secondary Schools, and by the Department

THE GRADUATE COLLEGE

Vincent F. Malek, Ph.D., Professor of Music, Dean

Ellsworth R. Shephard, M.A., Coordinator of Graduate Admissions

Edward J. Vokurka, M.A., Coordinator of Graduate Records

GOALS

The Graduate College attempts to provide an atmosphere and facilities where qualified students can pursue advanced studies and can join faculty in extending knowledge through research and other scholarly activities.

The Graduate College offers most of its courses during the late afternoon and evening to accommodate part-time students who are working toward the master's degree. Accordingly, course scheduling is limited; students wishing to carry a full academic load may not always be able to do so.

APPLICATION

Applications to the Graduate College are accepted on a continuous basis throughout the year. Application forms and additional information are available in the Graduate College Office, Classroom Building 4029.

Applicants to Northeastern's Graduate College must:

1. have an undergraduate degree from an accredited college or university, and
2. demonstrate a high level of scholastic ability as indicated by their overall grade average. Applicants must have a minimum of 3.75 GPA on a 5 point grading scale for all college level work completed. Applicant transcripts received from foreign schools require special evaluation which may result in a longer processing time.

ADMISSION TO THE GRADUATE COLLEGE

Procedure:

The applicant must:

1. File the appropriate application materials with the Graduate College Office (4029).
2. Request that an official copy of each transcript be sent directly to the Graduate College at Northeastern from each

of Public Instruction of the State of Illinois. It is also a member of the Council of Graduate Schools in the United States and of the Midwestern Association of Graduate Schools.

college and/or university previously attended. In-hand transcripts submitted by applicants are not accepted. Once received, transcripts are not released from the files of the Graduate College.

Each applicant's file will be reviewed by the Graduate Office staff and by the appropriate program advisor, and the student will receive a letter indicating whether or not admission has been granted.

ADMISSION TO A MASTER'S DEGREE PROGRAM

This decision is based upon:

1. Satisfying the published prerequisites for the program selected.
2. Having a GPA of at least 4.0 ("B" average) in undergraduate course work that is directly related to the intended graduate degree program.
3. Departmental approval.

The final decision to admit students to a graduate degree program rests with the faculty of the appropriate academic department.

Conditional admission to a master's degree program is sometimes granted upon the recommendation of the program advisor and with the approval of the Graduate Dean.

Conditional admission status, if granted, results when the applicant:

1. has a degree from a foreign institution or a U.S. school that does not have regional accreditation, and/or
2. has a marginal or erratic academic record, and/or
3. lacks specific program prerequisites. The department will decide the allowable extent of prerequisite deficiencies and how they are to be met.

Students admitted to graduate degree programs conditionally due to (1) or (2) above must earn a minimum 4.0 ("B" average) in their first 12 program credits at Northeastern, or they will be dropped from the degree program.

NOTE: Students who are dropped can continue to take courses at Northeastern under the graduate student-at-large classification, subject to all regulations pertaining to the latter classification.

At no time will a student be permitted to apply for degree candidacy until all conditions imposed at the time of admission to a master's degree program have been met.

NOTE: Students who apply late, allowing insufficient time to complete application processing for degree program admission,

may register as graduate students-at-large. (See provision 2. in the following section.) Applicants requiring the I-20 form (Certificate of Eligibility for Nonimmigrant Student Status) are not eligible to register until admitted to a degree program.

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 are not automatically accepted in a master's program. A maximum of 9 credit hours taken under this classification may later be applied to the student's graduate degree program, providing that such work corresponds directly to specific program requirements and satisfies 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, school, 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 or universities outside 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 prior to the granting of the bachelor's degree may be considered for acceptance to a master's program if these credits, a) are applicable; b) have not been applied to the baccalaureate degree; and c) were completed no more than 12 months prior to the date of 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.

GRADUATE COURSE AND GRADE REQUIREMENTS

Since each master's degree program has its own specific course requirements, it is imperative that the student contact the assigned program advisor. The letter notifying the student of admission to the degree program will identify this advisor. Detailed program counseling cannot be done at registration time; such academic advisement should be arranged for well in advance.

To complete a master's degree program successfully, the student must meet the following requirements:

- 1. The majority of courses in any master's program must be 400-level. Workshops and institutes are not normally accepted for degree program credit nor are Center for Program Development courses.
- 2. All credit within the scope of the specific master's degree program, whether or not applied toward program requirements, must average "B" or better. A maximum of 6 hours of "C" may be accepted. Courses with grades below "C" are not counted toward the degree.
- 3. A graduate student who receives grades of "C" or lower in four program courses will be immediately and permanently dropped from the degree program.
- 4. Graduate students who have less than a 3.0 GPA ("C" average) after completing 4 or more courses at Northeastern or who have not maintained a term GPA of 3.0 or better will be dropped from the university.
- 5. Some programs require each student to take and perform acceptably on the Graduate Record Examination or other standardized test (see program listings).

To remain in good standing in a graduate degree program the student must make satisfactory progress on a continuing basis. Lack of progress toward earning the degree will result in the student being dropped from the program.

THESIS PROCEDURES

In many of the graduate programs offered at Northeastern the student will have the option, by departmental approval or invitation, of completing a thesis. In some departments the thesis is mandatory.

The "Manual of Thesis Procedures" is available upon request in the Graduate College Office (4029). Students who write a thesis or do a project as part of their graduate degree requirements are expected to follow the guidelines in this manual.

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 review and by other universities as certification that the degree has been earned.

EXCEPTIONS

Exceptions to the published regulations and/or requirements of the Graduate College may be made only after approval of the Graduate College Dean, following submission of a written petition.

CHANGES IN POLICY

Northeastern Illinois University reserves the right to make policy changes as necessary.

GRADUATION

All graduate students are responsible for filing the following documents:
Application for acceptance to candidacy for the master's degree. This form should be submitted to the Graduate College Office upon completion of 12 credit hours of course work in the degree program with a minimum GPA of 4.0 ("B" average). A

maximum of 6 credit hours accepted on transfer may be counted in this 12 hour total.

Also, any required departmental test results must be on file in the Graduate College Office, and all provisions for students admitted conditionally must be met at the time this form is filed.

Application for graduation. This form should be filed in the Graduate College Office, accompanied by the non-refundable and non-transferable graduation fee.

- a. after the student has been notified of acceptance for degree candidacy,
- b. when there is reasonable expectation of completion of all requirements by the appropriate deadline date, and
- c. in accordance with the published schedule (see **Graduate College Deadlines for Graduation**).

Upon completion of an evaluation, the Graduate College will send a letter informing the student of any outstanding requirements. All requirements must be met no later than the published deadline for work completion. Time extensions cannot be granted and should not be requested.

Deadline dates for submission of these documents are printed below and are given each trimester in the Schedule of Classes.

MASTER'S DEGREE PROGRAMS

EDUCATIONAL ADMINISTRATION/SUPERVISION

Master of Arts in Educational Administration and Supervision (Cooperative Program with Chicago State University and Governors State University)156

EXERCISE PHYSIOLOGY/CARDIAC REHABILITATION

Master of Science in Exercise Physiology and Cardiac Rehabilitation166

GUIDANCE AND COUNSELING

Master of Arts in Guidance and Counseling
Community and Family Counseling146
Elementary School Level145
Secondary School Level145
Vocational Counseling145

HUMAN RESOURCE DEVELOPMENT

Master of Arts in Human Resource Development173

INNER CITY STUDIES

Master of Arts in Inner City Studies175

INSTRUCTIONAL MEDIA

Master of Arts in Instructional Media178

LANGUAGE ARTS

Master of Education in the Teaching of Language Arts179

LINGUISTICS

Master of Arts in Linguistics
Linguistics85
Teaching English as a Second Language85

LITERATURE

Master of Arts in Literature58

MATHEMATICS

Master of Science in Mathematics88
Master of Arts in Mathematics
for Elementary School Teachers88

MUSIC

Master of Arts in Music95

READING

Master of Arts in Reading181

SCIENCES

Master of Science in Biology41
Master of Science in Chemistry46
Master of Science in Earth Science51
Master of Science in Physics102

SOCIAL SCIENCES

Master of Arts in Geography and Environmental Studies
Geography and Environmental Studies68
Urban Land Use Planning68
Master of Arts in History72
Master of Arts in Political Science106

SPANISH

Master of Arts in Spanish (arrangement with Roosevelt University)64

SPECIAL EDUCATION

Master of Arts in Special Education
Early Childhood Special Education190
Educating Children with Behavior Disorders189
Educating Handicapped Adolescents190
Teaching Children with Learning Disabilities190
Teaching Educable Mentally Handicapped
Children and Youth189
Teaching the Gifted and Talented Child190
Teaching Trainable Mentally Handicapped
Children and Youth189

SPEECH

Master of Arts in Speech122

GRADUATE COLLEGE DEADLINES FOR GRADUATION

Graduation Date	Application Due	Work Completion Deadline
December, 1986	Sept. 2 — Oct. 10, 1986	November 7, 1986
April, 1987	Jan. 2 — Feb. 6, 1987	March 6, 1987
August, 1987	May 1 — June 5, 1987	July 10, 1987
December, 1987	Sept. 1 — Oct. 9, 1987	Nov. 6, 1987
April, 1988	Jan. 4 — Feb. 12, 1988	March 11, 1988
August, 1988	May 2 — June 3, 1988	July 8, 1988
December, 1988	Sept. 6 — Oct. 14, 1988	Nov. 11, 1988
April, 1989	Jan. 3 — Feb. 10, 1989	Mar. 10, 1989
August, 1989	May 1 — June 2, 1989	July 7, 1989
December, 1989	Sept. 5 — Oct. 13, 1989	Nov 10, 1989

COLLEGE OF ARTS AND SCIENCES

Frank W. Dobbs, Ph.D., Professor of Chemistry, Dean
Carol B. Gartner, Ph.D., Professor of English, Associate Dean
Friederike Wiedemann, Ph.D., Professor of Foreign Languages and Literatures, Associate Dean

The College of Arts and Sciences is the largest of the University's colleges. It comprises 22 departments which offer 14 master's degrees, 27 bachelor's degrees, and 33 minors. In addition, the College is responsible for the following programs: General Education, Honors, Skills Testing, Academic Advising, and Tutoring (see the appropriate sections in this catalog). 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
 - Criminal Justice
 - Earth Science
 - Economics
 - English
 - Environmental Studies
 - French
 - Geography

- History
- Information Science
- Judaic Studies
- Linguistics
- Mathematics
- Medical Technology
- Music
- Philosophy
- Physics
- Political Science
- Psychology
- Social Science
- 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 this option 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 elementary education should consult the appropriate department entry and the Elementary Education section of this catalog.

UNDERGRADUATE MINORS

Anthropology	
Art	
Asian Studies	
Biology	
Chemistry	
Dance	
Earth Science	
Economics	
English	
French	
Geography and Environmental Studies	
German	
Gerontology	
Greek Studies	
History	
Information Science	
International/Intercultural Studies	
Italian	
Judaic Studies	
Linguistics	
Mathematics	
Music	
Philosophy	
Physics	
Political Science	
Psychology	
Public Administration	
Russian	
Social Science	
Social Work	
Sociology	
Spanish	
Speech	

GRADUATE PROGRAMS

Departments in the College of Arts and Sciences offer 14 master's degree programs comprising 15 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

DEPARTMENTS/PROGRAMS

ANTHROPOLOGY

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

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 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 Social 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.

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

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.

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 Anthropology Department offers a wide variety of courses in social/cultural anthropology, archaeology, and physical anthropology.

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. Discussion of human behavior with emphasis on culture. Similarities among and differences between various cultures help us better understand cultures as ways of adapting to the world. The importance of culture in affecting behavior is a major focus of this course.

ANTH-213 Anthropology and Science Fiction, 3 cr. An examination of what it means to be human, biologically and culturally, by looking at alternative beings and cultures created by various writers. The following topics are covered: contact with alien intelligence; biology and culture; alternative human societies; and projection of present social trends into the future.

ANTH-214 Peoples of Africa, 3 cr. A survey of the diversity of African societies with primary emphasis on sub-Saharan Africa. Includes an analysis of European attitudes toward Africa and their effects.

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. Emphasis is placed on Mexico and Guatemala. Slides and other illustrative materials are used extensively.

ANTH-217 North American Archaeology, 3 cr. Deals with the prehistory of Native Americans (American Indians) in the United States and Canada. Traces the 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. The historical and comparative study of urban development. Emphasis is placed 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. Emphasis on the relationship 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-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 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. An ethnographic survey of the peoples and cultures of the Pacific Island areas of Melanesia, Polynesia, and Micronesia.

ANTH-304 Peoples of India, 3 cr. Ethnographic survey of the contemporary peoples 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. An ethnographic survey of the contemporary peoples and cultures of South America. Selected Indian cultures, peasant communities, and urban societies are compared.

ANTH-307 Role of Women in Different Cultures, 3 cr. A comparison of variations in the roles played by women in various groups, both past and present, and in the relative status of women vs. men and/or other women. The effect of variations in socialization and the means of access to economic, political, and/or religious power are included. Examples are drawn from the major culture areas outside of the United States.

ANTH-308 Peoples of Mexico, Central America, and the Caribbean, 3 cr. An ethnographic survey of the contemporary cultures of the peoples living in Mexico, Central America, and

the Caribbean Islands. Emphasis is on Spanish and/or 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. Emphasis is placed 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. The course concentrates on the artifacts and monuments, as well as 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 of importance. *Prereq.:* ANTH-212 or consent of instructor.

ANTH-313 Witchcraft and Sorcery, 3 cr. A 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, Old and New England, and twentieth century North America.

ANTH-314 Religion, Society and the Individual, 3 cr. A 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 belief in the various religions.

ANTH-316 Ancient Greek Archaeology, 3 cr. The remains of the ancient Greeks' technology (architecture, art, tools, weapons, etc.) are used as clues to reconstruct society in Bronze Age and Classical times. Emphasis is placed on the culture in its historical context. 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 behavior 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-318 Myth and Dramatic Ritual, 3 cr. A discussion of myths from around the world as expressions of fundamental human ideas and of rituals as dramatizations of those ideas. Emphasis is on symbolic and structural analysis. Includes discussions of Native American and African material, Greek myths, fairy tales, religious pilgrimages and initiation rites, among others. *Prereq.:* ANTH-212 or consent of instructor.

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 adaption 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 the recovery, analysis and interpretation of archaeological data. Course includes actual demonstration of some of the equipment employed in archaeological field work. It also deals with the theoretical value and limitations of the data, and some of the contributions of science to their interpretation. *Prereq.:* ANTH-212 and ANTH-215 (for majors); ANTH-113 (for non-majors).

ANTH-355 History of Anthropological Theory, 3 cr. Discussion of major theoretical approaches to the understanding of human behavior. Includes 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/or the nature of fieldwork. Must be taken in the senior year, followed by ANTH-363. Written and oral presentation of a senior project is emphasized.

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.

Urban

ANTH-URB-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.

ART

Donald Bulucos, M.F.A., Professor
Merrie Cutts, M.F.A., Assistant Professor
Jean Gillies, Ph.D., Professor
Dennis Mitchell, M.F.A., Associate Professor
LaVerne Ornelas, M.F.A., Professor, Chairperson

Russell Roller, M.F.A., Professor
Leopold Segedin, M.F.A., Professor
Thomas Sloan, Ph.D., Associate Professor
Mary Stoppert, M.F.A., Professor
Alan Wallie, 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.

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 will not accept as transferable any course in which a student earned a "D" grade.

The Art Department offers advanced courses for undergraduate students, in-service teachers and post-graduate students. The completion of prerequisite courses or the consent of the instructor is necessary to be able to register for these courses.

The Art Department may require all 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.

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 Society	3 cr.
ART-106	Introduction to Art History	3 cr.
ART-120	Drawing I	3 cr.
ART-140	Three-Dimensional Design	3 cr.
ART-160	Two-Dimensional Design	3 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-140	Three-Dimensional Design	3 cr.
ART-160	Two-Dimensional Design	3 cr.
ART-230	Introduction to Painting	3 cr.
ART-250	Introduction to Printmaking	3 cr.
ART-381	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-140	Three-Dimensional Design	3 cr.
ART-160	Two-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	Ceramics I	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. Introduction to the meanings and functions of the visual arts in Western history with an emphasis upon 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 influence 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-140 Three-Dimensional Design, 3 cr. A studio and lecture experience that explores fundamental 3-D design theory and concepts through the solution of studio problems utilizing 3-D materials and techniques.

ART-160 Two-Dimensional Design, 3 cr. A systematic exploration of order in two-dimensional space and the study of the interaction of method and technique in organizing form on a two-dimensional surface.

ART-180 Introduction to Art for the Non-Art Major, 3 cr. Introduction to art for the non-art major using a problem-solving approach in studio experiences with lecture and discussion. Requirement for elementary education majors.

ART-190 Studio Experiences for the Non-Art Major, 3 cr. Each offering of this course will specialize in a single medium such as painting, drawing, sculpture, printmaking, photography, small metals and ceramics.

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-160 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-160.

ART-240 Introduction to Sculpture, 3 cr. Traditional and contemporary sculpture concepts; an 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-160 or consent of instructor.

ART-251 Printmaking: Relief I, 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 I, 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-160 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. The course will encourage students and assist them in developing 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 Ceramics I, 3 cr. Introduction to the 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. Techniques explored include soldering, cutting, forming, stone setting, and finishing.

ART-280 Introduction to Interior Design, 3 cr. Study of the materials and accessories of decoration; their selection and arrangement on the basis of the requirements of use, economy, taste, and individuality. Problems of design and discriminative taste will 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-160 and ART-120 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-160.

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 that are appropriate to those techniques. Discussion of the principles and terminologies used in production. *Prereq.:* ART-160.

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 course offerings on special topics in art history. Consult the schedule of classes for particular 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 course offerings on special topics in art history. Consult the schedule of classes for particular 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 Art of the West, 3 cr. A study of the arts 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. Brief examination of the most important examples of sculpture and architecture only 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. A study of 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. Emphasis will be given to leading Baroque artists in Italy, Spain, Flanders, Holland, France and Germany.

ART-317 Sculpture and Architecture of the United States, 3 cr. Study of the 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. A study of European painting and sculpture from post-impressionism at the close of the nineteenth century through the various modernist movements of the twentieth century. Emphasis will be placed 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. Development of inquiry and understanding of the many problems of communication in teaching art in the intermediate grades. **Prereq:** ART-160 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 that demonstrate aesthetic and technical competence in black and white photography. **Prereq:** ART-262 or a portfolio of works which demonstrates 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 on soldering, forming, cutting, casting, stone setting, and finishing.

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 will 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 will 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 and ART-284.

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

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

ART-393 Studio Problems in Commercial Art, 3 cr. Studio projects in commercial art including basic design, composition and layout, appropriate to production requirements encountered in a commercial art studio. **Prereq:** ART-391S.

ASIAN STUDIES

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

UNDERGRADUATE PROGRAM

Minor in Asian Studies (18 cr. hrs.)

- 1. Courses selected to complete this minor
 - a. must be chosen from two or more academic disciplines,
 - b. must include at least 12 hours in 300-level courses,
 - c. must cover material about more than one Asian country, and
 - d. cannot be counted toward meeting requirements for any other major or minor.
- 2. 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., Assistant Professor
George Diepstra, Ph.D., Assistant Professor
Don J. Fanslow, Ph.D., Professor
Dennis M. Hall, Ph.D., Professor
Robert A. Hattaway, Ph.D., Assistant 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. The department also offers a separate major in Medical Technology. 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, and BIOL-107 Biological Effects of Foods and Drugs 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 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 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 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. 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 will effectively meet 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	4 cr.
Electives		12 cr.
	Total	38 cr.

Required advanced courses must include at least **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.

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 Algology	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.

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

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:

- BIOL-ZOOL-312 Vertebrate Physiology, rather than BIOL-BOT-315 Plant Physiology is recommended.
- For their twelve credit hours of biology electives, students should chose 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.

CHEM-212 General Chemistry II and CHEM-232 Organic Chemistry II are recommended in addition to the required cognate courses. Students should also complete one course in mathematics beyond MATH-106, preferably MATH-107 Calculus I.

Major in Medical Technology for the Bachelor of Science Degree

This program is designed for students seeking a laboratory career in the health fields (clinical laboratories in hospitals, HMOs, veterinary facilities, etc.) or who are interested in acquiring broad

laboratory skills applicable to many areas of development and research in science and industry.

Before being accepted into the program leading to the Bachelor of Science in Medical Technology, all students are personally interviewed by the coordinator of the Medical Technology Program, who will evaluate science credits and serve as advisor.

Students transferring from other academic institutions should expect to enroll in at least one trimester of academic courses at Northeastern before applying for clinical training at the School of Medical Technology.

Students are expected to maintain a minimum grade-point average of "B" in the sciences and mathematics, and a minimum of "C" in all other areas of study.

Approximately nine months before completion of the major (and when the student has a minimum of 76 credit hours towards graduation), the student should confer with the coordinator about applying to a Northeastern-affiliated hospital School of Medical Technology for the required year of clinical training. Currently, the affiliated Schools of Medical Technology are Evanston, Holy Cross, Michael Reese, St. Joseph, and Weiss Memorial. Enrollment in the clinical component of the Medical Technology Program is limited by the size of the class(es) in these affiliated hospital-based schools. Acceptance into the clinical component is not guaranteed. Students pay full tuition at the University in each of the three trimesters of their clinical experience.

Successful completion of the course work, including clinical experience, is required for the baccalaureate degree in Medical Technology as well as for eligibility to take a certifying examination. During the clinical year, students are required to show evidence of current health insurance, either through private coverage or that obtained through the university. In addition, evidence of professional liability insurance may be required.

Required Biology Courses:

BIOL-102	Biology of Organisms	3 cr.
BIOL-201	Biology of Cells	3 cr.
BIOL-316	Biochemistry	4 cr.
BIOL-318	General Microbiology	3 cr.
BIOL-327	Immunology	3 cr.
BIOL-ZOOL-312	Vertebrate Physiology	4 cr.
BIOL-MEDT-201	Introduction to Medical Technology	1 cr.
One elective (minimum) chosen from the following		3-4 cr.
BIOL-323	Physical Methods in Biology	3 cr.
BIOL-BOT-311	General Mycology	3 cr.
BIOL-ZOOL-201	Human Genetics or BIOL-311 Genetics	3 cr.
BIOL-ZOOL-213	Mammalian Anatomy or BIOL-ZOOL-323 Developmental Anatomy	4 cr.
BIOL-ZOOL-317	Animal Parasitology	3 cr.
BIOL-ZOOL-318	Vertebrate Histology	3 cr.
Total		24-25 cr.

Required Cognate 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.
PHYS-201	College Physics I	3 cr.
PHYS-203	Physics I Laboratory	1 cr.

MATH-106	Pre-Calculus Mathematics for Non-Mathematics Majors	4 cr.
Total		26 cr.

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

Required Clinical Courses:

BIOL-MEDT-301	Clinical Studies in Medical Technology I: Microbiology	5 cr.
BIOL-MEDT-302	Clinical Studies in Medical Technology II: Chemistry-Biochemistry	5 cr.
BIOL-MEDT-303	Clinical Studies in Medical Technology III: Immunology	5 cr.
BIOL-MEDT-304	Clinical Studies in Medical Technology IV: Hematology-Coagulation	5 cr.
BIOL-MEDT-305	Clinical Studies in Medical Technology V: Microscopy	5 cr.
BIOL-MEDT-306	Clinical Studies in Medical Technology VI: Immunohematology	5 cr.
Total		30 cr.

Minor in Biology (18 cr. hrs.)

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.	
Total	18 cr.

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

GRADUATE PROGRAM

Master of Science in Biology

The graduate program stresses balance in each of the major areas of biology rather than intensive specialization in a narrowly limited area. Because of this balance, a sound basis is provided for further graduate study. Laboratory work and introduction to research methodology are integral to the program. Topical areas studied include:

- Animal Morphology and/or Taxonomy
- Plant Morphology and/or Taxonomy
- Genetics
- Evolution
- Molecular Biology
- Animal Physiology
- Plant Physiology
- Ecology

Requirements for Admission to the Program:

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

Students must have

- a minimum of 15 undergraduate credit hours covering most of 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;
 - the balance of credits may be presented 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 Seminars in Research). 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 will present an oral defense of their thesis. Admission to this option is by departmental permission only.

Library Thesis Option

At least one course at the advanced undergraduate or the graduate level must be completed in each of the eight topical areas listed above. Also, 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 will be 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 and may substitute an upper level biology elective. 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 decision is made as to which option the student will follow.

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.

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.

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. Emphasis is given to their relation to body structure, function, and health. Lecture only.

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. Workshop in biology, 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-314 Cellular Physiology, 3 cr. Energy metabolism and biosynthesis; factors influencing and determining relative rates of their component metabolic reactions. Lecture and laboratory. *Prereq.:* BIOL-201 or BIOL-316 and six credit hours in the physical sciences.

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. Microorganisms, especially bacteria, their cultivation and laboratory study; methods of control; their importance in soils, industry, disposal of sewage, and spoilage of foods; production of disease and immunity. 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. Pathogens of man, other animals, and plants—including bacteria, actinomycetes, rickettsias, viruses, yeasts, molds, and protozoa; sources, modes and factors of infection, immunity, and hypersensitivity; clinical and pathological features, laboratory diagnosis, treatment and control of major human infectious diseases. Lecture only. *Prereq.:* six credit hours in general biology, including BIOL-201 and BIOL-102, plus 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-324 Radioisotopes in Biology, 3 cr. The use of radioisotopes in biology and medicine. First-hand planning and performance of a variety of radiotracer experiments are emphasized. Consideration of environmental implications of natural and man-made radiation sources. Lecture-discussion and laboratory. *Prereq.:* six credits in chemistry; six credits in physics; one course in biochemistry or a 300-level physiology course.

BIOL-325 History of Science, 3 cr. Development of 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 study of 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. The biological study of selected aquatic ecosystems. Investigations will include biological, chemical and physical parameters of freshwater communities. Field work will emphasize practical experience in specimen collection and identification; laboratory work will concentrate on water analysis and include 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 depend on availability; they commonly include zoos, area park districts and nature preserves, laboratories, etc. *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-391 Independent Study in Biology, 1 cr. A field, laboratory, or library study of a biologically oriented topic. Emphasis is placed on planning, carrying out, and writing a report on a project agreed upon by the student and an advisor. *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 will 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 mechanism 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-404 Advanced Cell Physiology, 3 cr. Topics in cell physiology; goals of research and recent contributions to the understanding of the molecular organization of the cell; the regulation of cellular activity in terms of molecular action and interaction. Lecture and laboratory. *Prereq.:* graduate standing, BIOL-314, BIOL-323, and BIOL-316.

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; the release of energy in enzymatic systems; equilibria of

important biochemical constituents in uni- and multi-celled organisms; the isolation and purification of biologically active compounds. Lecture only. *Prereq.:* graduate standing and BIOL-316; one course in physics recommended.

BIOL-407 Enzymology: Enzyme Structure and Function, 3 cr. Consideration of enzymes as protein catalysts; the structure of a biological catalyst as discerned by x-ray diffraction, chemical modification, nuclear magnetic resonance, and kinetic studies will be 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 will include contrasts between selected natural areas and similar ones altered by man. A summary interpretive paper, using data acquired, will be 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. An 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-481 Biological Literature, 3 cr. Preparation of a series of scientific papers based on a literature search. Activities will 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. Selected advanced studies in topics of modern biology. Topics studied will differ from term to term. Consult the schedule of classes for specific topics. *Prereq.:* graduate standing and consent of instructor.

BIOL-499 Seminars in Research, 6 cr. Guidance of students conducting research and writing a thesis to fulfill requirements 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 thesis.

Botany

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:** six credits in general biology or a course in botany.

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 and laboratory. **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 Algology, 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 as 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. The 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.

Medical Technology

BIOL-MEDT-201 Introduction to Medical Technology, 1 cr. The role, responsibilities, and clinical training of the medical technologist as a member of the health care team. Lecture only. This course is required of all students officially accepted in the Medical Technology Program. Medical technology students may take the course at any time before the fall of the year in which they apply for clinical training.

BIOL-MEDT-301 Clinical Studies in Medical Technology I: Microbiology, 5 cr. Clinical laboratory courses given by affiliated hospitals as part of the 12-month sequence in medical technology. In each of the three trimesters of the 12-month hospital sequence, students must enroll concurrently in two clinical studies courses, in sequence from I through VI, in order to obtain Northeastern credit for the hospital study. The total amount of credits towards graduation in the six clinical courses is 30 credit hours. **Prereq:** (a) satisfactory completion of all academic courses at Northeastern (minimum 90 credit hours) in the undergraduate program leading to the Bachelor of Science in Medical Technology; (b) formal acceptance by Northeastern affiliated hospital for a 12-month period of clinical laboratory training; and (c) registration by special written permission of the Department of Biology. **Coreq:** BIOL-MEDT-302.

BIOL-MEDT-302 Clinical Studies in Medical Technology II: Chemistry-Biochemistry, 5 cr. (See BIOL-MEDT-301 for description.) **Coreq:** BIOL-MEDT-301.

BIOL-MEDT-303 Clinical Studies in Medical Technology III: Immunology, 5 cr. (See BIOL-MEDT-301 for description.) **Coreq:** BIOL-MEDT-304.

BIOL-MEDT-304 Clinical Studies in Medical Technology IV: Hematology-Coagulation, 5 cr. (See BIOL-MEDT-301 for description.) **Coreq:** BIOL-MEDT-303.

BIOL-MEDT-305 Clinical Studies in Medical Technology V: Microscopy, 5 cr. (See BIOL-MEDT-301 for description.) **Coreq:** BIOL-MEDT-306.

BIOL-MEDT-306 Clinical Studies in Medical Technology VI: Immunohematology, 5 cr. (See BIOL-MEDT-301 for description.) **Coreq:** BIOL-MEDT-305.

Zoology

BIOL-ZOOL-201 Human Genetics, 3 cr. Heredity laws as they relate to humans. The nature and origin of genetic similarity and diversity. The 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. The taxonomy, anatomy, physiology, and significance of parasitic animals will be studied together with 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 (histology) of adult vertebrate animal cells, tissues, and organs. Lecture and laboratory. **Prereq:** six credits in general biology, including BIOL-102.

BIOL-ZOOL-319 Protozoology, 3 cr. A 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, combining 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. (Formerly BIOL-317; not open to students who completed BIOL-317.) **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. The taxonomy and field identification characteristics of local animal groups. Emphasis will be placed upon collecting organisms in selected ecosystems in the region. Both major invertebrate and vertebrate taxa will be surveyed; organisms collected in the field will be investigated further in the laboratory. Students will prepare a collection of labelled organisms. Lecture, laboratory, and field work. **Prereq:** six credits in biology.

BIOL-ZOOL-328 Animal Physiology, 3 cr. A study of physiological adaptations of animals to their environment. Both invertebrates and vertebrates will be discussed in regard to ecological and evolutionary factors. Laboratory exercises will illustrate basic principles of animal physiology and behavior. **Prereq:** six hours of general biology.

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. The physiological and biochemical evolution of animals; 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.

CHEMISTRY

Joseph Bachrach, Ph.D., Professor, Chairperson
Veronica A. Curtis, Ph.D., Associate Professor
Gloria Dimoplou, Ph.D., Professor
Frank W. Dobbs, Ph.D., Professor
Donald Mason, Ph.D., Professor
Howard Murray, Ph.D., Associate Professor
Paul Poskozim, Ph.D., Professor

Wayne Svoboda, M.S., Associate 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 Bachelor of Science and Master of Science degrees. 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 medical technology, 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 are evaluated and an appropriate program of study can be 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.		

Total 40-42 cr.

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

**Elective credit is given only for a course not used to fulfill required course work.

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

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

American Chemical Society approved program in Chemistry:

Qualified graduating Bachelor of Science chemistry majors can receive a certificate stating that they have completed a program that meets the A.C.S. standards for Professional Training. To qualify, the following additional requirements must be fulfilled:

- CHEM-311 and 312 must be taken during the junior year with PHYS-206 and PHYS-207 as prerequisites.
- CHEM-330, CHEM-331, CHEM-316 and CHEM-347 are required.

Minor in Chemistry (22 cr. hrs.)

The student must complete the following:

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 4.0 (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) of 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:

- The student must earn a 4.0 grade point average in all chemistry courses. This is in addition to the 4.0 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	The Chemical Bond	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.

A minimum of 15 hours 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 from other colleges may be accepted with the approval of the department and the Graduate College.

- 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 4.0 (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.

- Research and Thesis Work:** Students wishing to do laboratory or library research, or more formally, write a thesis, may do so under the following conditions:

- acceptance for candidacy;
- attainment of at least a 4.25 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.

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

- 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 4.0 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 trimesters at the university and have a grade point average of at least 4.25.

- 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. An 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. An introduction to chemistry through a study of drugs. Drug action and mechanisms are discussed on the basis of atomic, molecular, and cellular structure. Licit and illicit drugs, medicines, and food and food-related products are included.

CHEM-103 Chemistry and the Consumer, 3 cr. An introduction to chemistry based on the study of some of the processes and materials which chemistry contributes to our civilization. Elementary chemical principles will be 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. An introduction to chemistry based on a study of the universe. Included are a discussion of the chemical nature of the universe, the position of the planet Earth therein, and the chemical origin and role of life.

CHEM-110 Chemical Concepts, 3 cr. Survey course in chemistry designed for the non-science major. Such topics as the historical development of chemistry, atomic theory, solution chemistry, organic, and biochemistry are included. 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. This course is designed especially for students planning to take CHEM-211.

CHEM-211 General Chemistry I, 5 cr. An 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.

CHEM-231 Organic Chemistry I, 4 cr. A 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. Provides an opportunity for student and professor to combine talents and interests in creative chemical research. **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. **Prereq.:** CHEM-232.

CHEM-311 Physical Chemistry I, 4 cr. A 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 and 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 or 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. A 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. An 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 the above. Lecture and laboratory. **Prereq.:** CHEM-213, CHEM-232 and consent of instructor.

CHEM-331 Instrumental Analysis: Quantitative Methods, 4 cr. An introduction to the theory and practice of instrumental methods used to determine composition of materials, including such methods as 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 radiation. The course includes 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. The 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 are 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 of reaction rates and mechanisms of chemical reactions. Various theories of reaction rates will be studied and evaluated. **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 will select well-defined academic goals to be achieved within this framework. 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 are discussed. **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, diffraction, molecular weight determination, and dipole moments. Emphasis is placed on interpreting the combined data. **Prereq.:** graduate standing and CHEM-312.

CHEM-404 Chemical Thermodynamics, 3 cr. The principles of thermodynamics and their application to chemical problems. Particular emphasis is placed on partial molal qualities, the chemical potential, and the thermodynamics of chemical equilibria. **Prereq.:** graduate standing and CHEM-312.

CHEM-405 The Chemical Bond, 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. An introduction to those aspects of group theory and symmetry which are particularly relevant to chemistry. Topics will include 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 do 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 are studied along with appropriate mathematical analysis. Lecture only. **Prereq.:** graduate standing and CHEM-312.

CHEM-413 Modern Inorganic Chemistry, 3 cr. An 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. An advanced course in topics of current interest. **Prereq.:** graduate standing.

CRIMINAL JUSTICE

Randolph Bowcott, M.A., Assistant Professor
Kingsley Clarke, J.D., Assistant Professor
Renny Golden, D.Min., Associate Professor
Bernard Headley, Ph.D., Assistant Professor, Chairperson
Janet Green Marbley, J.D., Associate Professor

The Department of Criminal Justice focuses on the concerns of urban, low income communities whose residents are members of a group that is often processed by the criminal justice system. It is unique in being a pro-defense, pro-prisoner, pro-community program that attempts to offer a critical perspective on the criminal justice system. Field experience complements the academic program. The Department makes a special effort to involve and serve community groups, minorities and women. Students of all backgrounds and viewpoints are welcome to major in the program; the Department feels obligated to point out, however, that students seeking a police science, law enforcement, or corrections emphasis may find that their needs are better served by other programs at other institutions.

Because of large student demand, the Department of Criminal Justice developed a departmental admission procedure. Applications for admission to the major are available at the departmental office.

UNDERGRADUATE PROGRAM

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 I	
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.

COURSE OFFERINGS

CRJU-201 Introduction to the Criminal Justice System, 3 cr. Overview of police, court, and prison practice emphasizing class, race, and sex discrimination in the criminal justice system. Emphasis on the relationship between crime and key political and economic structures.

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. Emphasis on the relationship between theory and criminal justice policy formulation. Readings and lectures on theoretical material. **Prereq.:** CRJU-201.

CRJU-313 Prisons and Jails, 3 cr. Study of the historic development of prisons. Focus on current practice, emphasizing consequences of expanding the prison population and community based alternatives to incarceration. Field trips.

CRJU-315 Proseminar in Criminal Justice, 3 cr. Intensive study of such topics as the ethics of capital punishment, affirmative action, and women and revolution. Topics vary each term, reflecting current issues in the field.

CRJU-320 Independent Study in Criminal Justice, 3 cr. Independent research under the supervision of an instructor. Nature and scope of the research must be determined in consultation with the instructor prior to the beginning of the term. **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. The course projects 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-322 Women's Advocacy: Rape and Woman-abuse II, 3 cr. Under supervision of the instructor, students

work for a rape crisis hotline and act as lay legal advocates. Nature and scope of the course work must be determined in consultation with the instructor prior to the beginning of the term. **Prereq:** CRJU-321 and consent of instructor.

CRJU-323 Women Behind Walls, 3 cr. Study of women in prison and mental institutions and the socio-economic factors that determine 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. This course will examine the following questions: What theories of justice inform revolutionary practice and specifically what role women do play in revolution. Primary focus will be on women's involvement in liberation struggles in Central America. **Prereq:** a women's studies course.

CRJU-326 Juvenile Justice System, 3 cr. This course will examine the juvenile justice system in order to understand how and for whom the system functions. To answer these questions, a socio-economic analysis of the history of the juvenile justice system will be conducted.

CRJU-327 Immigration Policy and Human Rights Violation in Central America, 3 cr. This course will investigate Immigration & Naturalization Service legal deportation policy of Central American refugees and the integral relationship between that policy and continued U.S. State Department support of Salvadoran and Guatemalan governments.

CRJU-328 Sanctuary: The Church Breaks the Law, 3 cr. This course will study the movement of church/religious groups who challenge civil authority by breaking the law in order to harbor Central American refugees from deportation by the U.S. Immigration Service.

CRJU-330 Legal Research and Bibliography in Criminal Law, 3 cr. An intensive comprehensive introduction to researching problems by familiarization with research techniques and existing reference source materials. Visits to law libraries will be required.

CRJU-331 Law and Racism in America, 3 cr. Investigates and critically studies the nature of racism by determining 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. This course explores the relationship between the development of fascism and manipulation of the law and legal system by the national bourgeoisie and the fascists. Mexico, the Soviet Union, and the United States are examined for present fascist tendencies.

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 aim of this course is to expose students to the basic principles of American criminal law, to familiarize them with the current issues and controversies surrounding the criminal justice process, and to give them a basic knowledge of the constitutional rights of the accused. **Prereq:** CRJU-201.

CRJU-335 Legal Process I, 3 cr. Learning basic case skills with an emphasis on criminal law. An introduction to legal institutions and processes; the skills necessary in the use of criminal

and civil case law and legislation. The sources and forms of Anglo-American law, the analysis and synthesis of judicial precedents, the interpretation of statutes, and coordination of judge-made and statute law. Programmed instruction materials will be used along with other relevant materials. Students must be prepared to devote a minimum of six hours of intensive study per week.

CRJU-336 Legal Process II, 3 cr. Further extension of Legal Process I with 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. Students will learn basic labor law: workman's compensation, unemployment compensation, National Labor Relations Act, etc., through discussions on worker control of factories.

CRJU-339 Tenants Rights Clinic I, 3 cr. Provides students with the opportunity to apply their legal knowledge to practical problems. Under the supervision of a licensed attorney, students will study issues relating to landlord/tenant disputes and conflicts. Students will be trained to define and treat such potential problems.

CRJU-340 Tenants Rights Clinic II, 3 cr. Continuation of CRJU-339 with more emphasis placed on applying legal knowledge. Can be taken concurrently with CRJU-339.

CRJU-341 Skills for Inquiry in the Criminal Justice System I, 3 cr. Development of analytic and writing skills. Students will be instructed in the methodology of the social sciences and will be expected to develop research designs and to initiate studies in 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. This course is an extension of the basic Skills (CRJU-341) course. Its aim is to further equip majors with the basic research skills for the study of crime, the law, and the criminal justice system. **Prereq:** CRJU-341.

CRJU-345 Practicum in Criminal Justice, 3 cr. The practicum is designed to prepare students for their field work placements by emphasizing specific skills necessary for work in the field work seminar. The practicum focuses upon preparing students for entry level agency/community work. **Prereq:** All majors must complete one of the five specialized area courses; students must have completed all other required courses; consent of chairperson.

CRJU-350 Field Work Seminar, 6 cr. This unit of field instruction allows students to apply the specific skills learned in the practicum, as well as other classroom theories and concepts, in an agency/community setting. Requirements include 15 hours per week at work in the field and a 1 1/2 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, M.S., Assistant Professor
Charles W. Shabica, Ph.D., Professor, Chairperson
Mohan K. Sood, Ph.D., Professor
Hansa D. Upadhyay, Ph.D., Professor

Great progress and changes have taken place in the earth sciences in recent years. Of particular current interest are: the model known as Plate Tectonics which has revolutionized thinking in

earth science; satellite studies of the earth, which have contributed to a better understanding of our universe; and the focus on energy resources.

The Earth Science Department uses an integrated approach to the study of the problems of the earth environment through a synthesis of geology, meteorology, and oceanography. The emphasis, however, is on geology 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, and environmental fields, or for teaching earth science in secondary schools and colleges. Our programs have the flexibility to meet individual student needs.

The department currently has areas of concentration in geology, including petrology-mineralogy, minerals and energy resources, water resources, structural geology-plate tectonics, soil and environmental sciences. It also offers concentrations in lake and marine systems. Techniques of problem-solving in earth science are emphasized.

Departmental equipment includes apparatus for x-ray diffraction and x-ray fluorescence analysis, resistivity units, rock and thin section preparation and mineral separation apparatus. We also have sedimentation tanks, centrifuge and size analysis apparatus, weather facsimile recorder, Perkin-Elmer-4000 Atomic Absorption Spectrometer, several computers, mineral synthesis units, full facilities for petrographic studies and water quality analysis, two research vessels equipped for lake and near-shore marine sampling, and a teaching seismograph.

UNDERGRADUATE PROGRAMS

The liberal arts major in Earth Science leads to the degree of Bachelor of Science in Earth Science.

Earth science majors must maintain a "C" average in required major and supporting science courses.

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; (2) jobs in mineral and oil industries; (3) positions with U.S. or state geological surveys; (4) jobs with 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.

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.

* A 300-level Earth Science course not on this list may be substituted for an elective.
** INSC-204 may be substituted.

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. One goal is to develop the background necessary for careers in energy and mineral industries, and for employment with environmental and other agencies. As part of the program, students are encouraged to participate in basic research under the direction of departmental faculty.

In addition, program flexibility enhances relevance for secondary and elementary teachers.

Each program is systematically organized under the guidance of the 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. If a student does not pursue a research thesis, he/she must take two additional courses at the 400-level and write a library thesis or a departmental research paper to meet the research requirement. If the research paper option is selected the student must also register for ESCI-402 during a fall term. An oral presentation and defense is required for all 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, to include at least one laboratory course; and eight credit hours in physics, to include at least one laboratory course. An applicant deficient in no more than six credit hours of the above requirements may be admitted conditionally but must remove the deficiency as soon as possible.

Requirements for the Degree:

The student must satisfactorily complete a minimum of 45 credit hours of combined undergraduate and graduate earth science courses that include 30 credit hours at the 300 and 400-level. If the departmental research paper option is chosen 33 credit hours are required for the degree. Of these hours, a majority in graduate earth science courses at the 400-level is required, including six credit hours for the research thesis. No fewer than one and no more than three credit hours in non-research earth science seminar courses may be applied toward this total.

Financial Assistance:

A limited number of teaching, tuition and graduate research assistantships are available. Contact the department for additional information.

COURSE OFFERINGS

ESCI-104 Our Geological Environment, 3 cr. A study of the geologic aspects of the environment. Particular emphasis will be placed on nuclear and non-nuclear waste disposal, geohealth problems, mineral exploitation and energy resources, and geologic hazards.

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. Explores in the light of modern scientific knowledge the great mysterious phenomena of the earth such as the Bermuda triangle, Atlantis, the origin of life, wandering continents, aurora borealis, pyramids and Stonehenge, ice ages, dinosaur extinction, jet lag, diamonds, radioactive time machine, and unlimited energy.

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.

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-205 Water Resources and Urban Environment, 3 cr. Comprehensive study of the water cycle and its impact on society, with emphasis on methods of collecting and analyzing data.

ESCI-206 Rocks and Minerals, 4 cr. A detailed introduction to rocks and minerals — the essential materials of the solid earth. Classification and systematic studies 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 and laboratory. *Prereq.:* ESCI-211 and CHEM-211.

ESCI-207 The Atmosphere and the Oceans, 4 cr. A comprehensive introduction to the earth's hydrosphere and atmosphere. Their origin and evolution, physical and chemical characteristics, actions and interactions will be investigated. A

two-hour per week laboratory will involve 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. A study of the geological processes governing and controlling the scenic wonders of our continent, with particular reference to lands encompassed by 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. The history of remote sensing, operation of multispectral scanner systems, high altitude infra-red imagery, radar imagery, and digital image processing will be discussed. Applications to resource exploration and geologic mapping will be shown. *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-310 Optical and Determinative Mineralogy, 3 cr. Optical phenomena and the use of polarizing microscopes in determining various optical properties of minerals of major groups in thin sections. Thin section preparations, staining techniques, study of mineral powders, refractive index determinations; mineral separations by gravity and magnetic techniques. X-ray diffraction and its application to mineral studies. Display techniques for chemical and mineralogical data. *Prereq.:* ESCI-311, CHEM-211, and PHYS-201.

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 specimen and thin sections of minerals and the use of physical and optical properties in their identification. Lecture and lab. *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.:* three 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-315 Glacial and Quaternary Geology, 3 cr. Glacial and related features and chronology with particular emphasis on the Great Lakes and contiguous territory. *Prereq.:* ESCI-121 or ESCI-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. A systematic study of the more important stratified rocks of North America. *Prereq.:* ESCI-212 and ESCI-317.

ESCI-317 Principles of Sedimentation, 4 cr. The process of 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. *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. *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. Geologic 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 and lab. *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. *Prereq.:* ESCI-206 and ESCI-331.

ESCI-325 Seminar in Earth Science, 3 cr. Selected topics of current research interest. *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.:* Consent of instructor.

ESCI-327 Workshop in Earth Science, 2 cr. Field trips and work shops will be used to convey topics relevant to the Earth Sciences. The course is designed to provide a concentrated learning experience in specific areas with an emphasis on field studies. Consult the schedule of classes for specific topics. *Prereq.:* upper level undergraduate or graduate standing.

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. The 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 and laboratory. *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-212.

ESCI-335 Meteorology I, 4 cr. An 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 are studied. Laboratory work involves extensive use of maps and charts. *Prereq.:* PHYS-201.

ESCI-337 Principles of Hydrogeology, 3 cr. An introduction to the theory and principles of groundwater flow as well as streamflow. Topics include the hydrologic equation, evapo-transpiration, 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.

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. *Prereq.:* ESCI-206 or ESCI-311.

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. *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. A 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-407 Hydrogeology, 3 cr. The occurrence, movement, storage, and distribution of ground water; problems pertaining to water quality; sea water intrusion, water pollution and recharge of aquifers. *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 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; seminars. *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. *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. *Prereq.:* graduate standing and ESCI-311.

ESCI-412 Planetary Science, 3 cr. The study of the physical and chemical make-up of our solar system; meteorites or meteorite impact features; the lunar surface; the physical characteristics of the planets; geophysical and geochemical methods in planetary exploration. *Prereq:* graduate standing, ESCI-311 and CHEM-211.

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 the discussion of seafloor slabs contained by them; pre- and post-Mesozoic plate tectonics and growth of mountain belts and continents. *Prereq.:* graduate standing, ESCI 319, and ESCI-330.

ESCI-416 Applied Hydrology, 3 cr. The water budget and its various components are the basis of this course. Hydrologic theories, methodologies, and techniques of data analysis which are used to estimate and/or determine values for each component of the water budget are presented, discussed, and used. Computer modeling of water budget components will also be introduced. *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. *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. The gathering of oceanological data and development of the marine sciences. *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. *Prereq.:* ESCI-121 or 211, and ESCI-207.

ESCI-OC-334 Coastal Marine Research, 4 cr. Plan and conduct a study of the dynamics of marine tidal estuaries. Field trip to Atlantic or Pacific coastal environments. *Prereq.:* advanced standing in the sciences and permission of the instructor.

ESCI-OC-335 Ocean Resources, 3 cr. A comprehensive study of the current and future exploitation of the ocean resources. *Prereq:* ESCI-121 or 211, and ESCI-207.

ECONOMICS

Daniel J. Bergan, Ph.D., Assistant Professor
Audie R. Brewton, Ph.D., Assistant Professor

Thomas E. Collum, M.A., Assistant Professor
John Cownie, Ph.D., Professor
Lewis Freiberg, Ph.D., Associate Professor
James A. Kokoris, Ph.D., Professor, Chairperson
Diane L. Petersen-Salameh, Ph.D., Associate Professor
Sheldon H. Rothstein, M.A., Assistant Professor
Edward F. Stuart, Ph.D., Assistant 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, 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, government or teaching.

The prerequisite for a major in economics is satisfactory completion of three years or equivalent of high school mathematics. Students planning 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. 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-305	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-305	Business and Economic Statistics I.....	3 cr.
Electives (any three 300-level Economics courses except 311)		9 cr.
Total		18 cr.

Students may count either ECON-302 Economic Development or ECON-323 Economic Development of East Asia towards their minor requirements, but not both.

COURSE OFFERINGS

ECON-215 Principles of Macroeconomics, 3 cr. Elementary aggregate economics. Among the topics included are economic instability, countercyclical economic policies, money, the banking system, government economic activity, fiscal policy, monetary policy, and national income theory.

ECON-217 Principles of Microeconomics, 3 cr. Among the topics covered are supply, demand, prices, the working of markets, the markets for labor and other factors of production, distribution of the product and contemporary economic problems.

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-305 Business and Economic Statistics I, 3 cr. An 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 and hypothesis testing. *Prereq.:* ECON-215, ECON-217, and MATH-106 or MATH-104 or MATH-110.

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. Attention is given to 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, operation, performance and growth of alternative economic systems with emphasis on the U.S., U.S.S.R., and other economies, including newly developing economies. *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 and nonparametric tests. *Prereq.:* ECON-305.

ECON-311 Consumer Economics, 3 cr. This course covers topics such as general principles of consumer purchasing, budgeting income, use of consumer credit, use of leisure, money, and 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. An 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. An introduction to basic econometric and forecasting theory and methods, including two-variable and multiple regression and forecasting techniques; techniques of handling violations of basic assumptions and other specification errors. *Prereq.:* ECON-305 and MATH-104 or MATH-106 or equivalent.

ECON-319 Current Economic Problems, 3 cr. Analysis of a contemporary domestic or international issue. *Prereq.:* ECON-215 or ECON-217 or consent of instructor.

ECON-322 International Economics, 3 cr. A general course introducing 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. An 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, and an 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. This course provides the student with fundamental economic tools that can be applied to urban problems; it identifies economic causes and analyzes policies designed to correct these problems. **Prereq.:** ECON-215 and ECON-217.

ECON-334 Cost-Benefit Analysis, 3 cr. Alternative economic policies resulting from weighing the merits of public expenditures on various public projects. The course provides 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 an order or priority among the projects competing for limited funds. **Prereq.:** ECON-217.

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, Chairperson
K. Dale DeVille, Ph.D., Professor
Reynold Feldman, Ph.D., Professor
Carol B. Gartner, Ph.D., Professor
Thomas Hoberg, Ph.D., Associate Professor
Donald L. Hoffman, Ph.D., Professor
C. Jeriel Howard, Ph.D., Professor
Randolph H. Hudson, Ph.D., Professor
Sandra Hunt, Ph.D., Assistant Professor
Jacqueline Krump, Ph.D., Professor
Ely M. Liebow, A.M., Associate Professor
Gerald C. Nemanic, Ph.D., Professor
Robert N. Paine, Ph.D., Professor
Dorothy R. Patton, M.A., Associate Professor
Bettye Parker Smith, Ph.D., 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 Criticism 3 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-309 Medieval Literature
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 electives 6 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 Education 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: 1800 to the Present 3 cr.
If ENGL-218 was chosen,
choose one of the following: 3 cr.
ENGL-316 American Literature from the Civil War to World War I
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 Present 3 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-309 Medieval Literature
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 Shakespeare 3 cr.
ENGL-318F Readings in American Literature:
Junior Novel 3 cr.
ENGL-380 Multi-Cultural Literature in America 3 cr.

Linguistics (9 cr.)

- LING-203 The Development of American English or
LING-212 History of the English Language 3 cr.
LING-204 Language and Society or
LING-206 Language and Literature 3 cr.
LING-308 Grammars of English 3 cr.

Reading (6 cr.)

- READ-301 Teaching Reading in the Junior
and Senior High School 3 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-COMM-255 Oral Interpretation

Composition (6 cr.)

- ENGL-376 Advanced Composition 3 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-102 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: 12 cr.
Foreign Languages, Linguistics, and 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 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 3 cr.

ENGL-219	American Literature: 1880 to Present.....	3 cr.
ENGL-221	English Literature: Beginnings to c. 1750.....	3 cr.
ENGL-222	English Literature: c. 1750 to Present.....	3 cr.
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-202 Fiction, 3 cr. An introduction to the techniques met in fiction as a genre; works primarily from English and American fiction.

ENGL-203 Introduction to Short Fiction and the Drama, 3 cr. A study of literature by an 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. A study of literature by an examination of two major literary genres—poetry and the novel. Designed as an introductory study of literature at the college level.

ENGL-210 Fantasy and Science Fiction, 3 cr. Examination of major themes and motifs in two interrelated genres. Readings may range from acknowledged masters, such as Tolkien, Bradbury, and Asimov, to the most promising newcomers.

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-225 Satire, 3 cr. Range of satiric tone including prose, poetry, drama, and the novel; concentration on elements which comprise a satire, varieties of satire, and limitations of the genre.

ENGL-226 The Tragic Vision, 3 cr. Designed to examine the tragic view in literature, establish boundaries of tragedy, and consider various modes through which tragic tone is expressed; not limited to drama; includes such authors as Dostoevsky, Melville, and Conrad.

ENGL-228 The Comic Spirit in English Literature, 3 cr. Theories of laughter with an intensive study of great practitioners of comedy in English literature; emphasis on various literary forms leading to laughter (fabliaux, wordplay, dramatic comedies, irony) with examples of each type.

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-233 The Epic, 3 cr. The classic form and the many variations it underwent; readings in Homer and Virgil, the medieval epic, Cervantes, Milton, and contemporary American variations of the form.

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. Course with readings in which students explore disciplines of various forms of writing.

ENGL-300 Russian Literature: Gogol-Chekhov, 3 cr. The course covers the 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. A course dealing with the various attitudes toward love, including sexual and family relationships, as depicted in the literature of different ages and cultures. The changing social, ethical, and religious context of these views will be emphasized. *Prereq:* same as ENGL-300.

ENGL-306 Medieval Studies: Middle English Romance, 3 cr. The metrical romance in Middle English, the most significant product of the popular imagination in medieval England reflecting the life of the common man. *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 to Welsh folk tales to the courtly versions of twelfth-century France to culmination in definitive compilation by Sir Thomas Malory. *Prereq:* same as ENGL-300.

ENGL-309 Medieval Literature, 3 cr. English medieval literature, exclusive of Chaucer, from 1100 to 1500 including

prose, poetry, and drama; organized around central motifs of medieval literary thought; discussion of cultural and social backgrounds. *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* are 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; topics are listed in the schedule of classes. *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 purpose of this course is to trace 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 will be illustrated; the craft of the story will be detailed. Each student will select one writer in this area 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; topics are listed in the schedule of classes. *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. A study of 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. A study of 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. Description of 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. History and background of the Bible (Old and New Testaments) and versions of the Bible; selected readings from both Testaments and from English and American 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-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 (1837-1901). **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 are considered. **Prereq.:** same as ENGL-300.

ENGL-351 Development of the English Novel I, 3 cr. Forerunners of the English novel and the rough beginning of the

new form; from beginnings of psychological realism in the English novel to the novels of Dickens. **Prereq.:** same as ENGL-300.

ENGL-352 Development of the English Novel II, 3 cr. English novel from the dawn of the industrial revolution to the novels of James Joyce, with special attention to the influence of society on the novel and to the innovators of the novel form. **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. An intensive study of selected literary movements, figures, or themes in British literature; each section carries an identifying title. **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 Middle Western literature from frontier days to the present, stressing Mark Twain and the Chicago Renaissance writers. **Prereq.:** same as ENGL-300.

ENGL-369 Theory and Practice in Literary Criticism II, 3 cr. Representative literary theories from classical times to the present; e.g., those of Plato, Aristotle, Sidney, Johnson, Wordsworth, Arnold, Ransom, Barthes, deMan, and Fish. **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. Course with readings in which students develop skills in writing various forms of drama. **Prereq.:** same as ENGL-300.

ENGL-383 Creative Writing: Drama II, 3 cr. Course with readings in which students demonstrate mastery in various forms of drama. **Prereq.:** same as ENGL-300.

ENGL-384 Creative Writing: Poetry I, 3 cr. Course in which 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. Course in which 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. Course with readings in which students develop skills in writing prose fiction. **Prereq.:** same as ENGL-300.

ENGL-387 Creative Writing: Fiction II, 3 cr. Course with readings in which students write extensively in various forms of prose fiction. **Prereq.:** same as ENGL-300.

ENGL-389. Twentieth Century Poetry II, 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-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, 1 cr. Introductory course, stressing good newspaper practice, writing news stories, and getting interviews. **Prereq.:** same as ENGL-300.

ENGL-393 Journalism II, 1 cr. Writing stories for school paper, learning good copy reading and proofreading techniques, specialized newspaper writing (features, columns, etc.), and newspaper photography. **Prereq.:** same as ENGL-300.

ENGL-394 Journalism III, 1 cr. Stresses newspaper makeup; instruction occurs in classroom, with practical experience at the printer's shop of a school newspaper. **Prereq.:** same as ENGL-300.

ENGL-399 The Literature of Aging, 3 cr. By reading and discussing poems, short stories, drama, and essays containing aging or aged protagonists, students will be 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 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-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-432 The Literary Experience in Elementary School, 3 cr. Creativity in general and literary creativity in particular; imagination, its development and expression; aspects of literature in the classroom; aesthetics; language arts among the arts; individual and group projects in poetry and prose geared to the elementary level. **Prereq.:** graduate standing, admission to the Master of Education in the Teaching of Language Arts, or written consent of instructor.

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 basic writing students, 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. This course will offer 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, but also considering current controversies over authorship and the state of the text; attention will also be paid 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; the author for the study will be announced in the schedule of classes, e.g., Shakespeare, Spenser, Sidney. **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; the author(s) for the study will be announced in the schedule of classes. **Prereq.:** same as ENGL-421.

ENGL-450 Studies in English Literature, 3 cr. Advanced study of selected English writers; the author(s) for the study will be announced in the schedule of classes. **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. **Prereq.:** same as ENGL-441.

ENGL-455 Studies in World Literature, 3 cr. Advanced study of selected writers in World literature. **Prereq.:** same as ENGL-421.

ENGL-456 William Blake, 3 cr. An 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* to the dramatic treatment in 12th century chronicles to Boccaccio's great romance culminating in Chaucer's major verse 'novel' and Shakespeare's enigmatic drama. **Prereq:** same as ENGL-421.

ENGL-459 Dante, 3 cr. A 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-460 James Joyce, 3 cr. A study of the works of James Joyce, though the shorter *Finnegans Wake* will be used. The course will cover some of the major literary influences upon Joyce and will also focus upon the historical background of the early twentieth century. **Prereq:** same as ENGL-421.

ENGL-461 Dostoevski: The Major Works, 3 cr. The course will cover 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-470 Seminar in Faulkner, 3 cr. Intensive reading of the short fiction and novels of William Faulkner with specific attention to his development as a novelist and to his rightful place among twentieth century American authors. **Prereq:** same as ENGL-421.

ENGL-471 Nineteenth Century Poetic Narrative, 3 cr. A study of the longer works of the 19th Century British poets. **Prereq:** same as ENGL-421.

ENGL-472 Georgians and Edwardians, 3 cr. A study of English literature during the first part of the twentieth century. **Prereq:** same as ENGL-421.

ENGL-473 Aesthetes and Decadents, 3 cr. An examination of the aesthetic movement at the turn of the century. **Prereq:** same as ENGL-421.

ENGL-474 Seminar in Byron, 3 cr. A close examination of the poetic canon of Lord Byron. **Prereq:** same as ENGL-421.

ENGL-475 Seminar in Keats, 3 cr. A close examination of the poetic canon of John Keats. **Prereq:** same as ENGL-421.

ENGLISH LANGUAGE PROGRAM

Harold N. Hild, Ph.D., Associate Professor of Speech and Performing Arts

C. Jeriel Howard, Ph.D., Professor of English

Sandra Hunt, Ph.D., Assistant Professor of English

Myrna Knepler, Ph.D., Associate Professor of Linguistics

Audrey Reynolds, Ph.D., Professor of Linguistics, Coordinator

Rory Stephens, Ph.D., Associate Professor of Linguistics

The English Language Program, offered through the College of Arts and Sciences and the University at large, provides an opportunity for students to acquire the level of English language skills expected of university students and offers a tutoring service in the English Language Laboratory where students can receive individualized instruction which focuses on their specific language skill difficulties.

The English Language Program provides courses for three types of students: (1) those for whom English is a second language and who need work in both spoken and written English, (2) those who are native speakers of English or fluent bilingual speakers of English who need work in written language skills, and (3) those who need to improve their academic (study) skills.

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

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 Competence Examination. It will provide them with intensive, individualized instruction in the skills associated with college level competence 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 written English sentence skills and introduces them to basic principles of expository writing.

ELP-ESL-108 Aural-Lingual Communication, 3 cr. Practice in speaking and understanding idiomatic American English. (For non-native speakers of English only.)

ELP-ESL-110 English Sentence Skills, 3 cr. Analysis and drill in American English sentence patterns with special emphasis on the social and academic application of language skills. (For non-native speakers of English only.)

ELP-ESL-112 English Language Workshop I, 3 cr. This course introduces intermediate-level ESL students to basic principles of written English. (For non-native speakers of English only.)

ELP-ESL-114 English Language Workshop II, 3 cr. This course focuses on sentence-level skills. Students write short expository essays based on personal experience. (For non-native speakers of English only.)

ELP-ESL-120 English Language Workshop III, 3 cr. This course focuses on paragraph development, increased fluency in written English, and proof-reading skills within the framework of expository prose. (For non-native speakers of English only.)

ELP-118 Academic Skills, 3 cr. A comprehensive programmed approach to the learning of academic skills necessary for success in the university. The student is taught skills in reading, listening, note taking, examination preparation, and self-management.

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 range over a wide number of disciplines.

ELP-375 English Language Workshop, 3 cr. This course covers a wide range of topics which deal with multi-lingual and multi-cultural aspects of urban society. Among the topics which might be covered are the following: sentence structure for bilingual teachers, English for bilingual teachers. To determine which particular topic will be covered in a given trimester, consult the schedule of classes.

FOREIGN LANGUAGES AND LITERATURES

Lucretia Artajelo, M.A., Assistant Professor of Spanish

Bonnie Busse, Ph.D., Professor of Spanish

Ben Coleman, 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., Associate Professor of Spanish, Chairperson

Rodrigo Gonzalez, M.A., Assistant Professor of Spanish

Julio Jolly, M.A., Assistant Professor of Spanish

Dorette Klein, M.A., Assistant Professor of French

Albert Milanesi, M.A., Assistant Professor of French

Eric Moch, Ed.D., Assistant Professor of German

Valeska Najera, Ph.D., Assistant Professor of Spanish

Edgardo Pantigoso, Ph.D., Professor of Spanish

Angelina Pedroso, LL.D., Associate Professor of Spanish

Oscar Rodriguez, M.A., Assistant Professor of Spanish

Henry Russell, Ph.D., Associate Professor of French

Friederike Wiedemann, Ph.D., Professor of French

The Department of Foreign Languages and Literatures offers courses leading to the degree of Bachelor of Arts.

Foreign language study can perfect communication skills, acquaint students with masterpieces of literature, and develop an understanding of the principal differences and similarities between foreign and American cultures. Students will find their preparation for any career enhanced by a foreign language background.

The department offers courses in literature and culture that are taught in English. No knowledge of a foreign language is necessary for these courses. See course descriptions.

Courses in English specially designed for speakers of Spanish are offered. See course descriptions.

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 Pi (National Spanish Honor Society).

All French and Spanish majors must be assigned to a departmental advisor. Details are available in the departmental office.

All transfer students who major in a foreign language must take a minimum of 15 credit hours of course work in the foreign language at Northeastern.

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 enroll in FL-300 Foreign Language Clinical Experience in the Secondary School, concurrently with the foreign language methods course, and FL-FREN-315 Applied French Linguistics. 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 enroll in FL-300 Foreign Language Clinical Experience in the Secondary School, concurrently with the foreign language methods course, FL-SPAN-319 Applied Spanish Linguistics, and FL-SPAN-320 Spanish Grammar and How to Teach It. 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 a foreign language	
6 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 approved credit hours from Northeastern 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 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 of Foreign Languages and Literatures at Northeastern.

COURSE OFFERINGS

FL-300 Foreign Language Clinical Experience in the Secondary School, 3 cr. A supervised experience designed for students taking the academic major methods course with less

emphasis on observational experiences and more on 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 in keeping with these; the changing status of foreign language teaching; and the importance of language teaching in an interdependent world. Implications for foreign language teaching of recent developments in linguistics, psychology, psycholinguistics, curriculum, teaching materials and technology. Emphasis on designing, presenting and evaluating specific classroom procedures in the linguistically oriented teaching of the communicative competence skills. **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; actual 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.

English for the Spanish Speaking

FL-ESS-101 English for the Spanish-Speaking I, 3 cr.

Instruction specially designed for the Spanish-speaking student.

FL-ESS-102 English for the Spanish-Speaking II, 3 cr.

Continuation of English for the Spanish-Speaking I. **Prereq.:** FL-ESS-101 or equivalent.

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 French I. **Prereq.:** FL-FREN-101 or equivalent.

FL-FREN-103 French III, 3 cr. Continuation of French II. **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. Grammar review, reading, composition; particular emphasis on conversation. **Prereq.:** FL-FREN-103 or equivalent.

FL-FREN-210 Reading Modern French, 3 cr. Practice in reading modern texts of current interest and moderate difficulty. **Prereq.:** FL-FREN-103 or equivalent.

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-103 or equivalent.

FL-FREN-221 French Grammar and Composition I, 3 cr. Overview of grammar with emphasis on writing skills. **Prereq.:** FL-FREN-103 or equivalent.

FL-FREN-222 French Conversation II, 3 cr. Continuation of French Conversation I. **Prereq.:** FL-FREN-220.

FL-FREN-223 French Grammar and Composition II, 3 cr. Continuation of French Grammar and Composition I. **Prereq.:** FL-FREN-221

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. **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. Historical survey of the principal literary and philosophical currents of the seventeenth century. Conducted in French. **Prereq.:** FL-FREN-223.

FL-FREN-322 Eighteenth Century French Literature, 3 cr. Historical survey of the principal literary and philosophical currents of the eighteenth century. Conducted in French. **Prereq:** FL-FREN-223.

FL-FREN-323 Nineteenth Century French Literature, 3 cr. Historical survey of the principal literary and philosophical currents of the nineteenth century. Conducted in French. **Prereq.:** FL-FREN-223.

FL-FREN-324 Twentieth Century French Literature, 3 cr. Historical survey of the principal literary and philosophical currents of the twentieth century. Conducted in French. **Prereq.:** FL-FREN-223.

FL-FREN-360 French Seminar, 3 cr. Study of selected themes; particular topics are announced in the printed schedule of classes. 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 German I. **Prereq.:** FL-GER-101 or equivalent.

FL-GER-103 German III, 3 cr. Continuation of German II. 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 German Grammar and Composition I. **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 German Conversation I. 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. A 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 themes; particular topics are announced in the printed schedule of classes. Conducted in German. **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 Modern Greek I. **Prereq.:** FL-GREK-101 or equivalent.

FL-GREK-103 Modern Greek III, 3 cr. Continuation of Modern Greek II. Completes the study of the basic elements of Greek. **Prereq.:** FL-GREK-102 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 Italian I. **Prereq.:** FL-ITAL-101 or equivalent.

FL-ITAL-103 Italian III, 3 cr. Continuation of Italian II. 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 Italian Conversation and Composition I. **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 themes; particular topics to be announced in the printed schedule of classes. **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 Polish I. **Prereq.:** FL-POL-101 or equivalent.

FL-POL-103 Polish III, 3 cr. Continuation of Polish II. 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 Russian I. **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. A 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 Russian Conversation and Composition I. *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.** A 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 themes; particular topics are announced in the printed schedule of classes. *Prereq.:* consent of instructor.

Spanish

- FL-SPAN-101 Spanish I, 3 cr.** Spanish as a second language. Development of basic skills in listening, speaking, reading, and writing. Cultural appreciation.
- FL-SPAN-102 Spanish II, 3 cr.** Continuation of Spanish I. *Prereq.:* FL-SPAN-101 or equivalent.
- FL-SPAN-103 Spanish III, 3 cr.** Continuation of Spanish II. 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 I, Spanish II, and Spanish III.
- 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 Spanish Conversation I 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.** Instruction in Spanish grammar for the Spanish-speaking student. Conducted in Spanish. *Prereq.:* FL-SPAN-228.
- FL-SPAN-312 Spanish Conversation III, 3 cr.** 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.** A review and analysis of basic grammar with emphasis on the presentation of structure. *Prereq.:* FL-SPAN-224, FL-SPAN-230 and/or FL-SPAN-250.
- FL-SPAN-324 Advanced Composition, 3 cr.** Advanced study of Spanish composition utilizing complex grammatical structures with special attention to style. Conducted in Spanish. *Prereq.:* FL-SPAN-317 or FL-SPAN-312.
- FL-SPAN-325 Spanish Seminar, 3 cr.** Study of selected themes; particular topics are announced in the printed schedule of classes. Conducted in Spanish. *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 través de la Música, 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 Generación 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: Modernism, Regionalism, Social Protest, etc. 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-354 Spanish-American Literature to 1888, 32 cr.** Reading and study of Spanish-American Literature up to and including the Romantic period. 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. Study of principal literary movements through the novel, short story, poetry and drama. Conducted in Spanish. *Prereq.:* FL-SPAN-312 or FL-SPAN-317 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.** Reading of Spanish literature of the nineteenth Century.

- Special emphasis is placed on the 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.** Study of the 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 themes; particular topics are announced in the printed schedule of classes. Conducted in Spanish. *Prereq.:* consent of instructor.
- FL-SPAN-409 Seminar in Twentieth Century Spanish-American Literature, 3 cr.** Advanced study of selected themes; particular topics are announced in the printed schedule of classes. *Prereq.:* graduate standing, admission to the Roosevelt University-Northeastern Illinois University Master of Arts Program or written consent of instructor.

GEOGRAPHY AND ENVIRONMENTAL STUDIES

Robert Easton, M.A., Assistant Professor
William Howenstine, Ph.D., Professor
Ying-Cheng Kiang, 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 Bachelor of Arts and Master of Arts degrees. The programs focus on professional geography and environmental studies, teacher training, and the enrichment of related 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-111 Comparative World Cultures
G&ES-104 World Geography
G&ES-105 Contemporary Issues
- Physical Environment: 6 cr.
G&ES-205 Climate, Soils and Vegetation
G&ES-206 Landforms
- Human Environment: (Select two) 6 cr.
G&ES-212 Economic Geography
G&ES-213 Cultural Geography
G&ES-317 Urban Geography
- Geographic Techniques
Graphic Techniques: 6 cr.
G&ES-322 Aerial Photo Interpretation
G&ES-376 Cartography I

- Research Techniques: (Select two) 6 cr.
G&ES-351 Statistics for Geographers
G&ES-374 Research Methods in
Environmental Perception
G&ES-380 Field Methods

Approved electives in concentration	12 cr.
Total	39 cr.

Areas of specialization offered within this program include economic geography, socio-cultural geography, physical geography, urban geography, regional geography, resource development and conservation, and geographic techniques.

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 interested in environmental planning/management may seek careers in urban, regional, park and recreation planning/management; water, energy resources, land use planning/management; international resource development; and environmental legislation/regulation. Students interested in environmental interpretation/ education may seek careers as naturalists in parks and outdoor agencies, as environmental educators in camps and social service agencies, or the program may be used as supplemental preparation for pre-service and certified teachers.

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 (such as communication, systems analysis, planning, policy formation, management, administration, and education).

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 Geography and Environmental Studies 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 and 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 environmentalists 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 two 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 II3 cr.
- G&ES-411 Scope and Philosophy of Geography and Environmental Studies.....3 cr.
- Approved Geography and/or 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 admission requirements: Minor in geography, environmental studies, and/or urban studies; 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 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 II3 cr.
- G&ES-442 Geographic Problems in Quantitative Measurements or one other approved statistics course.....3 cr.
- ART-301 Urban Environmental Design or one other approved physical planning course3 cr.
- PSCI-PA-332 Public Administration or one other approved political science course3 cr.
- G&ES-450 Seminar in Comprehensive Planning.....3 cr.
- G&ES-445 Seminar in Resource Management and Decision-Making.....3 cr.
- One additional sub-section of G&ES-443 Seminar in Urban Land Use Planning or G&ES-451 Seminar in Recreation Planning3 cr.
- G&ES-461 Independent Study (Field Experience)3 cr.
- Approved electives.....9 cr.
- Total 33 cr.

COURSE OFFERINGS

- G&ES-104 World Geography, 3 cr. A world geography course designed to analyze global patterns, processes, interrelationships; to acquire knowledge related to place geography; and to develop map reading, interpretation and reporting skills.
- 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-111 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.

- 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, covering such topics as environmental degradation, law and impact; land-use planning; resource development; population-resource pressures; urbanization; and technological development. The course content will range 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 form 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 the 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 Wine, Beer and Booze: A Geographical Perspective, 2 cr. The production, distribution and consumption of alcoholic beverages.
- G&ES-220 Environmental Pollution Control, 3 cr. An 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 topics.
- 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 will vary 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. Includes 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-314 Political Geography, 3 cr. Differences in territorial control that exist from place to place in relation to land-forms, 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 process 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 Resource Management, 3 cr. A general forestry course providing a basic understanding of forest uses and problems and of forest management policies and practices in the United States and the world.
- G&ES-328 Wildlife Resource Management, 3 cr. A general wildlife management course designed to give resource planners, interpretative naturalists, and teachers a basic understanding of wildlife values, wildlife conservation principles and practices, and current wildlife policy issues. Emphasis will be placed throughout on urban wildlife, its benefits and means of enhancing them, appropriate for a metropolitan area such as northeastern Illinois. The 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. A 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 will be examined, together with policy options and issues in implementing such alternative technologies.

G&ES-331 The Natural Environment in Spring, 3 cr. An integrative study of seasonal changes of the natural environment in spring. All factors of the natural environment will be considered – climate, soils, water, plants, animals – and the human relationships associated with seasonal changes will be examined.

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 Fuels, 3 cr. Examination of the geographical distribution and locational factors influencing the use of fossil fuel energy resources and the dynamics of their consumption, including an overview of historical patterns, and current and future trends. New technologies and management strategies will be studied against the background of finite resource base and projected need for worldwide conservation of fossil fuels.

G&ES-340 Water Resources Planning, 3 cr. A 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 an 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, revitalization, restoration and gentrification emphasizing public and private market initiatives. Field work in the Chicago metropolitan area will provide 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. An analysis of the morphology of coastal environments including study of the factors that influence their development and distribution. The factor of human impact on contemporary coastal environments is also analyzed. *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. 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-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. Provides an opportunity to investigate 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-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. *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 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 will be 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-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 makeup 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-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

Henry Russell, Ph.D., Associate Professor of French,
Coordinator

UNDERGRADUATE PROGRAM

Minor in Greek Studies (18 cr. hrs.)

Requirements:

FL-GREK-101	Modern Greek I	3 cr.
FL-GREK-102	Modern Greek II	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., Associate Professor
Carl Hammond, Ph.D., Professor
S. Lorenzo Harrison, Ph.D., Professor
Sally Ann Hastings, Ph.D., Associate 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
Steven A. Riess, Ph.D., Professor

Gregory H. Singleton, Ph.D., Professor
P. Craig Smith, Ph.D., Professor
June Sochen, Ph.D., Professor
Salme Harju Steinberg, Ph.D., Professor,
Chairperson

Kenneth W. Stetson, Ph.D., Assistant Professor
C. David Tompkins, Ph.D., 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 will aid all students in their preparation for careers.

The department offers the Bachelor of Arts degree, an undergraduate minor, and the Master of Arts degree in history.

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.
HIST-202 History of Afro-Americans to 1877	3 cr.
HIST-203 History of Afro-Americans Since 1877	3 cr.
HIST-214 United States History, 1607-1877	3 cr.
HIST-215 United States History, 1877-Present	3 cr.

Two courses in non-European and non-United States History: 6 cr.
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.

Students wishing to be certified for teaching history in secondary schools should consult the Secondary Education section of this catalog. Please note that 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.)

The student must successfully complete six history courses (18 credit hours) of which a minimum of nine credit hours must be earned at the 300-level.

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 humanities courses which are approved by the History Department.

Thesis Option

Required Courses:

HIST-451 Historiography and Historical Method (or an alternative 400-level history course selected with the consent of the advisor)	3 cr.
Two graduate research seminars	6 cr.
Five 300 or 400-level history electives chosen in consultation with the advisor (at least two courses must be at the 400-level)	15 cr.
HIST-431 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-451 Historiography and Historical Method (or alternative 400-level history course selected with the consent of the advisor)	3 cr.
Two graduate research seminars	6 cr.
Seven courses of which at least four are 400-level graduate readings courses or additional seminars	at least 12 cr.
and at the most three are 300-level courses chosen in consultation with the advisor	maximum 9 cr.
cognate electives	0-6 cr.
Total	36 cr.

NOTE: Students are expected to enroll in 400-level courses. No more than 9 credit hours of 300-level courses may be chosen with the advisor's consent. 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 will be introduced to historical process, method, and perspective in U.S. cultural history.

HIST-107 Themes in Modern African History, 3 cr. Survey of the African continent beginning with the late nineteenth century and covering the imposition of colonial rule, impact of the world wars, and African nationalism.

HIST-109 Introducing Latin America, 3 cr. A non-survey approach to Latin American history: culture, geography, politics, etc. of Latin America.

HIST-111 Currents in Western Civilization, 300 B.C. — 1500 A.D., 3 cr. A 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. A 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 schedule of classes for particular topic.

HIST-202 History of Afro-Americans to 1877, 3 cr. A survey course covering the history of Black Americans from the African background through the Reconstruction period. Emphasis is devoted to 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. A survey course covering the history of Black Americans from the end of Reconstruction to the present. Emphasis is placed 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; socio-economic, 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. This course will be an introductory survey of the Chicano experience as it emerges from the conquest of the Aztec, the Spanish colonization, the Republic of Mexico and the incorporation by the United States by war of what is now the Southwest. Emphasis will then focus on 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. A history of the Black experience beginning with African origins and followed by interactions with the Oriental, Arab and European worlds. In addition to the African heritage, there will be stress laid upon the role of Blacks in Latin American history as well as the impact of Blacks upon the history of the United States.

HIST-217 Business in American Life, 3 cr. An introduction to the history of U.S. business institutions and their influence on U.S. society through an overview of the discipline of business history and the social effects of U.S. business since the colonial period.

HIST-301 The Jacksonian Era, 1824 to 1840, 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; nationalism and sectionalism; economic growth;

national expansion; political and social theories of the Jacksonian period. **Prereq.:** HIST-214.

HIST-302 From Jazz to Rock: Popular Music in American History, 3 cr. Approaches the various forms of popular music as expressions of social history, tracing the linkages between popular music and the evolution of American civilization in the 20th century. Particular attention is given 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.

HIST-303 American Culture in the 1960's, 3 cr. Studies the 1960's in terms of the prevailing cultural and countercultural expressions of these turbulent years. The course treats the decade in regards to such social forces as politicized youth, the Kennedy mystique, and the Vietnam War — as well as the many forces of social unrest such as inner city rebellions, hippie lifestyles, and popular defiance of governmental authority. The class seeks to understand the 1960's by drawing from the mass media of the times.

HIST-304 The Early National Period, 1789-1824, 3 cr. A 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. **Prereq.:** HIST-214 or equivalent or consent of instructor.

HIST-305 History of Rome, 3 cr. A study of the history of Rome from prehistoric cultures to the end of the Roman Empire.

HIST-306 Europe During the Ancient Regime-Seventeenth and Eighteenth Centuries, 3 cr. A study of the political, economic, social, and intellectual development of Europe in the seventeenth and eighteenth centuries.

HIST-307 Reconstruction, 1862-1877, 3 cr. In-depth study of the effort, during and after the Civil War, to "reconstruct" the divided nation. The political events of Reconstruction are seen in the context of social and economic developments. Reconstruction is studied both as the consequence of the Civil War and as a set of events that have profoundly affected the subsequent history of the United States. **Prereq.:** HIST-215; strongly recommended: HIST-214 and HIST-332.

HIST-308 The Civil War, 1861-1865, 3 cr. In-depth study of the Civil War, as a pivotal event in American history, and as a series of interrelated, far-reaching social, political economic, and intellectual changes affecting all aspects of American life. **Prereq.:** HIST-214; strongly recommended: HIST-215 and HIST-332.

HIST-309 U.S. Social History to 1865, 3 cr. An 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. Special attention will be given to the variety of forms of social organization and the growth of diversity in American culture. **Prereq.:** HIST-214 recommended.

HIST-310 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. **Prereq.:** HIST-215 recommended.

HIST-312 The American Revolution, 1763 to 1789, 3 cr. Intensive study of the events leading to American Independence; social and political changes accompanying independence; America under the Articles of Confederation; the writing and adoption of the Constitution. **Prereq.:** HIST-214.

HIST-313 Medieval Europe, 3 cr. An upper level course focusing on the major themes of the Middle Ages in Europe with emphasis on Western Europe. **Prereq.:** HIST-111.

HIST-314 French Revolution, World Revolutions, 1789-Present, 3 cr. A survey of the great French revolution, 1789-1815, and its impact upon world events to the present time. Special attention will be paid to definitions of individual rights emerging from the revolution and the fate of 'Liberalism' in the 19th and 20th centuries. The course will also focus upon the origins of modern nationalism and national liberation struggles from 1789 - present.

HIST-315 A History of the United States Jews, 3 cr. A 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 history. **Prereq.:** HIST-215 and HIST-214 recommended.

HIST-317 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.

HIST-318 The United States and Vietnam, 3 cr. A survey of the background, course and current implications of America's longest war: Vietnam, 1950-1975.

HIST-319 Europe in the Age of Revolution, 1789-1871, 3 cr. Study of the historical forces in European society from the French Revolution to the completion of the unification processes.

HIST-320 Europe in the Age of Imperialism, 1871-1919, 3 cr. Study of the historical forces in European society during the period of great territorial expansion and rivalry culminating in the First World War.

HIST-321 Europe in the Age of Ferment, 1919-Present, 3 cr. European history in the time of recurrent warfare, dislocation, authoritarianism, and reappraisal.

HIST-323 Television in American History, 3 cr. This course traces and analyzes the historical role of television in American society. It approaches TV in terms of program content and as an influential medium of communication. Special emphasis is placed on such themes as 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.

HIST-324 The Era of Franklin D. Roosevelt, 1929-1945, 3 cr. An 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. **Prereq.:** HIST-215 or equivalent.

HIST-325 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.

HIST-326 History of Pre-Modern China, 3 cr. An introduction to the civilizations of China; philosophy, political history, religion, literature, art, and material culture will be discussed. Emphasis will be given to both the specific data and broad interpretations of Chinese history.

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-328 History of Africa, 3 cr. Historical survey of Africa south of the Sahara. Special emphasis is devoted to such themes

as state formation and African politics, the influence of Islam, European contact and the slave trade, colonialism, the rise of African nationalism, and the emergence of independent states.

HIST-330 Issues in Twentieth Century Business History, 3 cr. Topics in the history of organizational changes in the workplace and the corporation; changes in the relationship between government and business; the non-profit sector and philanthropy; the business of mass media.

HIST-331 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.

HIST-332 The Coming of the Civil War, 3 cr. Intensive study of the various political, social and economic factors that led to the breakdown of constitutional government and the beginning of the Civil War. **Prereq.:** HIST-214

HIST-333 Hollywood as History: American Film, 1930-1945, 3 cr. Through analysis of commercial feature films from the period of 1930-1945, students gain insight and understanding of the cultural evolution of the United States in this time of ferment.

HIST-334 Cinema and Society: American Film 1945-1960, 3 cr. Employing commercial motion pictures as cultural-historical artifacts offering insights into history, this course treats American society after World War II — and before the social tumult of the 1960's — as a period of readjustment, of Cold War and political uncertainty, of social expansion, and of emerging new social forces.

HIST-335 Film and History Since 1970, 3 cr. Treating feature films as cultural indicators offering insights and understanding, this course studies the evolution of American society since 1970 as communicated in commercial motion pictures. It sees movies as reflectors and influencers of society.

HIST-336 Independent Study in History, 3 cr. Intensive study in selected subjects and periods of history. **Prereq.:** consent of instructor.

HIST-337 Independent Study in History, 2 cr. (See HIST-336 for description.)

HIST-338 Independent Study in History, 1 cr. (See HIST-336 for description.)

HIST-340 Problems in History, 3 cr. Exploration and analysis of themes or topics in history designed to introduce students to the relevant sources and to scholarly research. Consult schedule of classes for topics.

HIST-341 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. **Prereq.:** two courses in United States History.

HIST-342 Intellectual History of the United States, 1865 to present, 3 cr. Modern period in intellectual history; social Darwinism, pragmatism, and liberalism are three of the systems studied. **Prereq.:** two courses in United States history.

HIST-343 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. **Prereq.:** HIST-214.

HIST-344 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, as well as the rise of segregation at the turn of the century; particular attention is paid to the problem of the Black American and the value system of the South in light of civil rights considerations. **Prereq.:** one course in United States history.

HIST-345 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 topics. **Prereq.:** two courses in history.

HIST-346 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.

HIST-347 History of England from 1688 to the Present, 3 cr. Tracing 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.

HIST-349 Tudor England, 3 cr. Major political, social, intellectual and economic trends in sixteenth century England.

HIST-351 History of Crime and Violence in America, 3 cr. A 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.

HIST-353 Chicanos in American Society, 3 cr. In-depth analysis of the Chicano experience in the United States. Incorporated within an historical framework will be an examination of different theories explaining that experience, e.g. internal colonialism, racism, class segmentation. Special attention will be focused on the Chicano Movement as it intellectually reflected the evolving Mexican American community and also influenced that development. The course will briefly deal with the relationship of Chicanos to other Latino and Latin American peoples.

HIST-354 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. **Prereq.:** one general course in Latin American history.

HIST-355 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. **Prereq.:** one general course in Latin American history.

HIST-357 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. The successes and failures of Bismarckian and Wilhelmian Germany stress the impact of Prussia-Germany on Europe and the world through 1918.

HIST-358 Russian History from the Varangians to 1855, 3 cr. The Russian people, state, and culture from their origins to the death of Nicholas I.

HIST-359 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.

HIST-364 Modern Chinese History, 3 cr. A topical presentation of modern Chinese history: analysis and discussion of the institutional and intellectual changes and developments

brought about in China by modernization, rebellion, revolution, and war.

HIST-366 The Age of the Reformation, 3 cr. The religious crisis within Roman Catholicism and the genesis and growth of the Protestant movement. **Prereq.:** HIST-111 or HIST-112.

HIST-367 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. Special attention will be given to the dynamics of the relationships between Christianity and the various cultures in which it has been housed.

HIST-369 Twentieth Century Germany, 3 cr. The 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, followed by a survey of post-war Germany.

HIST-370 George Orwell and 20th Century Tyranny, 3 cr. An examination of Imperialism, Fascism and Communism as they are presented by the author of *Animal Farm* and 1984. Special emphasis will focus upon the linkage of language and politics in Orwell's writings. McCarthyism and Watergate also will be covered with an eye to their relevance to Orwell's warnings.

HIST-373 The Emergence of Industrial and Urban America, 1877-1901, 3 cr. Study of the formative years of modern America from the conclusion of reconstruction to the advent of the Theodore Roosevelt administration and national progressivism. Emphasis is placed on those ideas, institutions and factors which help explain the growth of present urban America.

HIST-379 Contemporary Historical Problems, 3 cr. Exploration and analysis of important problems in the world today. The course is designed to make students more aware of these political, economic, social, and cultural issues. Consult the schedule of classes for specific topics.

HIST-380 History of Japan, 3 cr. A history of Japan from prehistory to modern times. Lectures on the data of Japanese history and discussions on the major paradigmatic approaches to the study of these data. **Prereq.:** HIST-104.

HIST-381 United States Foreign Relations, 1775-1898, 3 cr. Developments of American foreign policy, diplomacy and other relationships with the rest of the world from the American Revolution through the Spanish-American War.

HIST-382 United States Foreign Relations, 1898-1945, 3 cr. The United States as a world power; consequences of the Spanish-American War; new relationships with Latin America, Asia and Europe; the United States and World War I; the United States and the Long Armistice; American involvement in World War II.

HIST-383 The Woman in American History, 3 cr. A survey, from colonial times to the present, of the role of the woman in America including a description of women's reform movements. **Prereq.:** one course in United States history.

HIST-384 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.

HIST-387 Pro-Seminar in Afro-American History, 3 cr. Intensive reading and discussion. Under the direction of the instructor, students will be assigned weekly readings on major aspects of Afro-American history. **Prereq.:** upper division or graduate standing and consent of instructor.

HIST-389 Urban History of the United States 1877 to Present, 3 cr. A general survey of urban America with emphasis on various institutions covering the years since Reconstruction including immigration, reform and urban planning.

HIST-390 Pro-Seminar in American History, 3 cr. Intensive reading and discussion. Under the direction of the instructor, students will be assigned weekly readings, prepare papers, and discuss some major aspect of American history.

HIST-391 Pro-Seminar in History, 3 cr. Intensive reading and discussion. Under the direction of the instructor, students will be assigned weekly readings, prepare papers, and discuss some major aspect of history.

HIST-393 Historical Biography, 3 cr. Exploration and analysis of important biographies which treat major or representative historical figures. The course is designed to make students more aware of the personal, psychological, and period forces affecting the behavior of key figures in history.

HIST-394 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. **Prereq.:** two courses in history and consent of instructor.

HIST-395 Internship II, 3 cr. See description for HIST-394. This course allows student interns to increase their workplace experience to at least 16 hours per week. Must be taken concurrently with HIST-394. Does not count towards major requirements. **Prereq.:** two courses in history and consent of instructor.

HIST-396 Internship III, 3 cr. See description for HIST-394. This course allows student interns to increase their workplace experience to at least 24 hours per week. Must be taken concurrently with HIST-394 and HIST-395. Does not count towards major requirements. **Prereq.:** two courses in history and consent of instructor.

HIST-398 Women in Popular Culture, 3 cr. A survey of novels, radio, movies, music and TV from the viewpoint of feminist scholarship.

HIST-422 Seminar in Afro-American History, 3 cr. Intensive study and research into contemporary aspects of Afro-American Life. A seminar paper is required. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-424 Seminar in Twentieth Century European History, 3 cr. Seminar on selected problems in twentieth century Europe; students must present papers on particular topics for discussion and analysis. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-431 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. **Prereq.:** acceptance to master's degree candidacy in history.

HIST-451 Historiography and Historical Method, 3 cr. Provides the student with historical understanding; covers philosophies of history and methods of historical research. **Prereq.:** graduate standing.

HIST-461 Readings in Modern European History, 3 cr. Intensive readings, analysis, and discussion of aspects of the history of Modern Europe. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, at least one course in modern European history, or consent of instructor.

HIST-462 Readings in European Diplomatic History, 3 cr. Intensive readings, analysis, and discussion of major problems in the history of European international relations. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, a course in European diplomatic history, or consent of instructor.

HIST-463 Readings in Early American History, 3 cr. A systematic in-depth study, analysis, and criticism of the principal monographs, treating various aspects of seventeenth and eighteenth century American History. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing and two courses in United States history.

HIST-464 Readings in 20th Century American History, 3 cr. A systematic in-depth study, analysis, and criticism of the principal monographs, treating various aspects of twentieth century U.S. History. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing and two courses in United States history.

HIST-465 Readings in American Foreign Policy, 3 cr. A systematic and in-depth study, analysis and criticism of the principal monographs dealing with the making of American Foreign Policy since 1895. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, a course in American diplomatic history, or consent of instructor.

HIST-467 Readings in Latin American History, 3 cr. A systematic in-depth study, analysis and criticism of the principal monographic works dealing with various aspects of Latin American History. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing and two courses in Latin American history.

HIST-469 Readings in Asian History, 3 cr. An introduction to the problems, methods, and bibliography of Asian History. Students can choose topics in social, economic, or intellectual history of China, Japan, and Korea. Readings will be selected by the instructor and will include relevant and important books, monographs, and articles in Western languages. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing and two courses in Asian history.

HIST-471 Seminar in Latin American History, 3 cr. Problems and crucial issues of colonial, nineteenth-century and contemporary Latin America; students will prepare a seminar paper. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-472 Seminar in British History, 3 cr. Research in various topics in British history. Students will prepare a seminar paper. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-473 Seminar in United States History in the Twentieth Century, 3 cr. In-depth study of problems in the history of the United States during this century; students will prepare a seminar paper. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-474 Seminar in United States Intellectual History, 3 cr. Study of selected topics; goals are oriented to the major writings in the field and research experience. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-476 Seminar in American Foreign Policy, 3 cr. Preparation of original research papers dealing with the making of American foreign policy since 1895. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-477 Seminar in Early American History, 3 cr. Reading of primary and selected secondary works and class evaluation of original research papers dealing with some aspect of

American Colonial History. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other history readings course or consent of instructor.

HIST-478 Readings in British History, 3 cr. Exploration and analysis of themes or topics in British history designed to introduce students to the relevant literature and monographs. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing.

HIST-480 Graduate Readings in History, 3 cr. A systematic, in-depth study, analysis, and criticism of the principal monographic works dealing with various aspects of history. Readings courses are offered in American, European and non-western history. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, admission to history graduate program, or consent of instructor.

HIST-481 Research Seminar in History, 3 cr. Intensive investigation of original research materials, and preparation, criticism, and revision of original papers. Research seminars are offered in American, European, and non-western history. Consult the schedule of classes for specific topics. **Prereq.:** graduate standing, HIST-451 and one other 400-level history readings course or consent of instructor.

HIST-482 Independent Graduate Study in History, 1 cr. Intensive and guided study in selected subjects and periods of history. **Prereq.:** graduate standing and consent of instructor.

HIST-483 Independent Graduate Study in History, 2 cr. Intensive and guided study in selected subjects and periods of History. **Prereq.:** graduate standing and consent of instructor.

HIST-484 Independent Graduate Study in History, 3 cr. Intensive and guided study in selected subjects and periods of history. **Prereq.:** graduate standing and consent of instructor.

INFORMATION SCIENCE

William Barnes, Ph.D., Professor
Louis Becker, Ph.D., Professor
Kenneth Biss, Ph.D., Associate Professor
Betty Brantley, M.M., Instructor
Netiva Caftori, M.S., Assistant Professor
Miroslava Carlson, M.S., Assistant Professor
Christine Georgakis, M.S., Assistant Professor
Mohammed Haque, M.S., Assistant Professor
Walter Kirchherr, M.S., Assistant Professor
Donald La Budde, Ph.D., Professor
Susan Marcus, M.S., Instructor
Richard Neapolitan, Ph.D., Associate Professor
Norman Noerper, M.B.A., Assistant Professor
Victor Pellegrini, Ph.D., Professor, Chairperson

The curriculum offered by the Department of Information Science is designed to serve three purposes:

1. To offer a major program in information and computer science for persons who wish to pursue a career in this field;
2. To offer a minor in information science for students who feel the need for a less extensive concentration in computing techniques, and
3. To serve students in other academic disciplines by offering instruction in computer applications useful in their areas of specialization.

The Department offers an undergraduate major with three choices of emphasis. In each area of emphasis, the student is guided through a carefully selected sequence of courses designed

to provide a thorough grounding in practical aspects of the field. The student will also acquire enough theoretical background to enable him or her to keep up with the rapid changes in computer technology. With a slight variation in the selection of courses, students should be qualified to enter a graduate program in information and computer science. Students graduating from this program have access to excellent career opportunities.

UNDERGRADUATE PROGRAMS

General Requirements:

During their first term, transfer students should have all transferred Information/Computer Science courses evaluated by the Department of Information Science for 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 Information Science course, except INSC-100 (Introduction to Personal Computing), students must obtain special permission from the Department advisor.

No student may register for more than three (3) Information Science courses during any 16 week term.

For further details, contact the Department.

Major in Information Science for the Bachelor of Science Degree

To declare a major in Information Science, a student must:

- 1. Complete INSC-101 Introduction to Computer Science with a grade of "C" or better.
- 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 an Information Science Major handbook in order to be aware of any changes in requirements.

Major Requirements:

Thirty six credit hours of information 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 Information Science courses at Northeastern and meet all major requirements.

Students who intend to pursue an advanced degree in Information/Computer Science should plan on completing Calculus II and should consider taking courses in Discrete Structures and Linear Algebra.

Required Core Courses:

INSC-101	Introduction to Computer Science	3 cr.
INSC-205	IBM 360/370 Assembler Language Programming	3 cr.
INSC-207	Algorithmic Processes	3 cr.
INSC-304	Data Structures	3 cr.
Total:		12 cr.

No substitutions are allowed for Information Science core courses.

Emphasis I: Business Data Processing

Required Courses:

INSC-202	COBOL Programming	3 cr.
INSC-308	Operating Systems Concepts	3 cr.
INSC-312	Advanced COBOL Programming	3 cr.

INSC-315	Database Management	3 cr.
INSC-316	Introduction to Systems Analysis	3 cr.
INSC-318	JCL and Service Programs	3 cr.
Two INSC 300-level electives, approved by the Department		6 cr.
Core Courses		12 cr.
Total		36 cr.

INSC-201 (Discrete Structures) may be substituted for one 300-level elective.

This track is designed primarily for students interested in applications programming.

Emphasis II: Systems Programming

Required Courses:

INSC-202	COBOL Programming	3 cr.
INSC-302	Systems Programming	3 cr.
INSC-306	Advanced Assembler Programming	3 cr.
INSC-307	Programming Languages	3 cr.
INSC-308	Operating Systems Concepts	3 cr.
INSC-309	Compiler Theory	3 cr.
INSC-318	JCL and Service Programs	3 cr.
One INSC 300-level elective, approved by the Department		3 cr.
Core Courses		12 cr.
Total		36 cr.

Approved electives for Systems Programming track:

INSC-315	Modern Database Management
INSC-317	Operating Systems Theory
INSC-330	Telecommunications
INSC-331	Computer Networks
INSC-333	UNIX System
INSC-335	Artificial Intelligence

This track is designed primarily for students interested in working with technical support systems.

Emphasis III: Computer Science

Required Courses:

INSC-302	Systems Programming	3 cr.
INSC-307	Programming Languages	3 cr.
INSC-308	Operating Systems Concepts	3 cr.
INSC-309	Compiler Theory	3 cr.
INSC-317	Operating Systems Theory	3 cr.
INSC-333	UNIX System	3 cr.
INSC-335	Artificial Intelligence	3 cr.
One 300-level elective, approved by the Department		3 cr.
Core Courses		12 cr.
Total		36 cr.

Approved electives for Computer Science track:

INSC-201	Discrete Structures
INSC-305	Computer Logic and Circuitry
INSC-315	Modern Database Management
INSC-326	Computer Use for Numerical Methods
INSC-330	Telecommunications
INSC-331	Computer Networks

INSC-201 (Discrete Structures) may be substituted for the 300-level elective.

This track is designed primarily for students intending to pursue an advanced degree in Computer Science.

Minor in Information Science (18 cr. hrs.)

A student may complete a minor in Information Science by selecting courses totalling at least 18 credit hours from those offered by the Department of Information 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.

COURSE OFFERINGS

INSC-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. (Not applicable to either Information Science major or minor.)

INSC-101 Introduction to Computer Science, 3 cr. This is a preparatory course for students who wish to pursue further work in Information 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.

INSC-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. The course involves no programming. Prereq: INSC-101 and MATH-104.

INSC-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: INSC-101.

INSC-203 PL/I Programming, 3 cr. A survey of the general-purpose language PL/I 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: INSC-101.

INSC-204 FORTRAN Programming, 3 cr. An in-depth study of the FORTRAN programming language, emphasizing mathematical, scientific, and statistical applications. The student studies methods of problem solving and writes FORTRAN programs for testing on the computer. Prereq: INSC-101.

INSC-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: INSC-101 and one 200-level programming language course.

INSC-207 Algorithmic Processes, 3 cr. The 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 pseudo code and will develop programs in interactive PASCAL. Prereq: INSC-101.

INSC-302 Systems Programming, 3 cr. Introduction to systems programming, including use and implementation of assemblers, macros, loaders, compilers, and operating systems. Prereq: INSC-304 and INSC-308.

INSC-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: INSC-101.

INSC-304 Introduction to Data Structures, 3 cr. The 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: INSC-207.

INSC-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: INSC-101.

INSC-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 placed on the definition, creation, and maintenance of basic DASD files using JCL and data management macro instructions. Prereq: INSC-205.

INSC-307 Programming Languages, 3 cr. The 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/I, FORTRAN, COBOL, Pascal, ALP, LISP, SNOBOL and others. Prereq: INSC-205 and INSC-304.

INSC-308 Operating Systems Concepts, 3 cr. This is 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: INSC-205 and INSC-207.

INSC-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: INSC-304.

INSC-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.

INSC-311 Modern Computer Architecture, 3 cr. This course is intended for the 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: INSC-205 and INSC-207.

INSC-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.:** INSC-101 and INSC-202; **corequisite** INSC-318.

INSC-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.:** INSC-207 and MATH-104.

INSC-314 Independent Study in Computer Science, 3 cr. Individual research or applications project in information or computer science. **Prereq:** consent of instructor.

INSC-315 Modern Database Management, 3 cr. Theoretical foundations and state-of-the-art of database management systems. The relational, hierarchical and network approaches to database management systems and representative systems are described. User interfaces are emphasized. **Prereq:** INSC-207.

INSC-316 Introduction to Systems Analysis, 3 cr. Information processing requirements of an organization, emphasizing business applications. Includes analysis of organization and procedures, forms and work-flow, work distribution, and methods and effects of computerization. **Prereq.:** INSC-101 and ACTG-202.

INSC-317 Operating Systems Theory, 3 cr. An in depth study of the design of a modern time-share multiprogramming operating system such as UNIX or VMS. The major emphasis will be placed on the implementation of classical operating system algorithms for processing control, memory management and file systems. A major class project will be assigned. **Prereq.:** INSC-304, INSC-308 and INSC-333.

INSC-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 application areas. **Prereq.:** INSC-202 and INSC-205.

INSC-319 Top-Down Structured Programming, 3 cr. Principles and applications in structured programming including topics on program correctness, stepwise refinement, top-down design and integration, as well as CPT approach to project organization. The student will design and implement several software projects using top-down problem solving and structured coding. **Prereq.:** INSC-207

INSC-320 Advanced PL/I Programming, 3 cr. The use of PL/I in the creation and processing of sequential, indexed sequential, and direct files. Sequential and random access methods as implemented in PL/I. Other topics include controlled storage, based variables and pointers, with applications to input-output operations and subprograms, program documentation, and PL/I structured programming techniques. **Prereq.:** INSC-101 and INSC-203; **corequisite** INSC-318.

INSC-322 Statistical Computer Program Packages, 3 cr. The 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.:** INSC-101 and MATH-275.

INSC-326 Computer Use for Numerical Methods, 3 cr. Study of 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.:** MATH-202 and INSC-207.

INSC-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 information science.

INSC-331 Computer Networks, 3 cr. This course deals with the subject of distributed computer systems and provides an understanding of various architectures that facilitate the distribution of information processing. Included are the concept of computer networks in general and layered protocols in particular, the data link protocol, the network layer protocol, and their implementations in some of the existing computer networks. The local area networks and other packet switching networks are also covered. Finally, the course examines the transport layer and session layer, and the services that they provide for the operating system. **Prereq:** 12 credit hours of 300-level courses in information science.

INSC-333 UNIX System, 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:** INSC-207.

INSC-335 Artificial Intelligence, 3 cr. The 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:** INSC-304.

INSC-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 Information Science for the purpose of satisfying the course requirement. The project should take approximately 168 hours to complete. **Prereq.:** at least 24 credit hours in information science courses in an approved track with an average grade of "B" or better, consent of sponsoring institution, and consent of the department.

INSC-391 Supervised Field Study II, 6 cr. (Internship) Same as INSC-390 as INSC-390 except that the project should take approximately 336 hours to complete.

INSC-392 Supervised Field Study III, 9 cr. (Internship) Same as INSC-390 except that the project should take approximately 504 hours to complete.

INTERNATIONAL/INTERCULTURAL STUDIES

Gary L. Bevington, Ph.D., Professor of Linguistics, Coordinator
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 enrich their personal lives and enhance their chance for a rewarding professional career.

Students in various majors will find their education enhanced by choosing this minor in order to give an international/intercultural perspective to their major.

Students interested in international business should consult the listings under the College of Business and Management for the International/Intercultural Studies Business Minor.

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 Studies.....	3 cr.
SSCI-I/IS-102	Introduction to Intercultural Studies.....	3 cr.
SSCI-I/IS-301	Senior Seminar in International/Intercultural Studies	3 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;
- International problems: pollution, population, food, war and peace;
- 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. Examines the global nature of the contemporary world. Concepts useful to an understanding of ecological and social systems and the interconnections between them will be presented. Issues, such as energy, population, and food will be discussed as well as the nature of global resources and the economic and political arrangements needed to handle these resources equitably.
SSCI-I/IS-102 Introduction to Intercultural Studies, 3 cr. Introduction to basic concepts will enable students to gain

insights into and an appreciation of the cultural diversity of the peoples of the world. The course will address issues such as ethnocentrism, cultural relativism, intergroup relations and intercultural communication. Students will develop analytical and problem solving skills and become acquainted with the scientific methodology related to the issues.

SSCI-I/IS-201 You, Your Community and the World, 3 cr. Explores the relationships of students as residents of Chicago with the global community. Students will 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. A 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 will be held 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.

JUDAIC STUDIES

UNDERGRADUATE PROGRAMS

Major in Judaic Studies for the Bachelor of Arts Degree

In cooperation with Spertus College of Judaica, Northeastern Illinois University offers courses in Judaic Studies leading to the degree of Bachelor of Arts. The program offers students an opportunity to study in five areas with options for a general major or for specialization in Rabbinic Literature, Hebrew Language and Literature, Jewish History, Jewish Thought, and the Bible.

Requirements for a major in Judaic studies include elementary and intermediate Hebrew (or equivalent), and 30 credit hours of Judaic studies. Of the 30 credit hours at least three credits must be taken in each of the specialized areas listed above. Students requesting more specialized programs must receive permission from the academic dean.

The transfer credit policy for Judaic Studies is as follows: A maximum of 15 semester hours in Judaic Studies (i.e., not Hebrew language) courses completed at an accredited institution may be applied toward fulfillment of the major. In addition, up to 12 semester hours in Hebrew language may be accepted in fulfillment of the language requirement.

Judaic Studies courses may vary by location and by credit. Please check each trimester Schedule of Classes for current information.

Minor in Judaic Studies (18 cr. hrs.)

At least one course must be taken in three of the five areas of Judaic Studies: Rabbinic Literature, Hebrew Literature, Jewish History, Jewish Thought and Bible. A maximum of 9 semester

- hours of Judaic Studies earned at an accredited institution may be applied toward fulfillment of the minor.

Hebrew Language is not required for the minor; however, up to six hours in Hebrew may be credited towards the completion of the minor.

COURSE OFFERINGS

JUDS-101 Elementary Hebrew, 3 cr. The first of a two semester course sequence designed to give the student a basic oral and written understanding of the Hebrew language. For students with no previous Hebrew.

JUDS-104 Intermediate Hebrew, 3 cr. The first of two courses on an intermediate level.

JUDS-107 Elementary Arabic, 3 cr. The first of a two semester course sequence designed to give the student a basic oral and written understanding of the Arabic language. For students with no previous Arabic.

JUDS-110 Intermediate Arabic, 3 cr. The first of two courses on an intermediate level.

JUDS-113 Elementary Yiddish, 3 cr. The first of a two semester course sequence designed to give the student a basic oral and written understanding of Yiddish. For students with no previous Yiddish.

JUDS-119 Conversational Hebrew: Elementary, 2 cr. This course uses an audio-visual approach in teaching modern conversational Hebrew. Grammar pattern, reading, and composition are integral parts of the learning experience, but the primary aim is fluency in everyday speech. This is the first of a two semester course sequence. For students with no previous Hebrew.

JUDS-120 Conversational Hebrew: Intermediate, 3 cr. The first of two courses on an intermediate level.

JUDS-121 Conversational Yiddish: Elementary, 2 cr. The first of a two semester sequence designed to give the student an introduction to Yiddish speech emphasizing everyday communication and idiomatic usages. Grammar, reading, and composition are added as course progresses. For students with no previous Yiddish.

JUDS-122 Conversational Yiddish: Intermediate, 2 cr. The first of two courses on an intermediate level.

JUDS-125 Introduction to the Talmud and Midrash, 3 cr. A survey of the major post-biblical rabbinic texts, their development and role in Jewish history and culture. Definitions of talmudic and midrashic terminology; sources of rabbinic authority; structure and significance of the various texts; basic themes in Jewish law and lore. All texts and discussion in English.

JUDS-130 Basic Ideas in Judaism, 3 cr. Central concepts in Jewish thought from classical to modern times. Survey of ideas in Jewish theology, mysticism, medieval philosophy, and ethics. Contemporary theories of Jewish existence, values, society and civilization.

JUDS-140 Jewish History in the Classical Age: 1800 B.C.-500 A.D., 3 cr. Hebrew origins. The first Commonwealth; Babylonian exile and Judea under Persia. Judea under Hellenistic Egypt and Syria. The Maccabean uprising and Hasmonean kingdom. Roman rule and the first revolt. The Jewish diaspora between the Persian Gulf and the Atlantic. The shaping of Jewish destiny under Christendom.

JUDS-141 Jewish History in the Middle Ages; 500-1650 A.D., 3 cr. The Jews in the Byzantine empire, in the Caliphate, and under pre-Crusade Christendom. The Crusades.

Muslim Spain and the Golden Age of Jewish culture. Early Ashkenazic culture. Ashkenazic Jewry's geographic expansion. Expulsions from England, France and Spain. The Jews in the Polish-Lithuanian Commonwealth and the Golden Age of talmudic studies.

JUDS-142 Jewish History in the Modern Age: 1650-present, 3 cr. The return of the Jews to England and France and the emergence of Jewish communities in the New World. The Sabbatheï Zebi movement. Capitalism, Enlightenment and the emancipation of Western Jewry. The emergence of Russian Jewry. Modern anti-semitism. The new major center in the United States. The Zionist movement. The Holocaust. The State of Israel.

JUDS-150 The World of the Bible, 3 cr. A survey of the Old Testament -the Pentateuch, Prophets, and Writings - within the literary and historical settings of the ancient Near East. Introduction to biblical narrative, law, prophecy, poetry and wisdom literature. All texts and discussion in English.

JUDS-202 A Survey of the Bible: Pentateuch, Prophets, Writings, 3 cr. Literary forms, major streams of thought, and religious and cultural institutions reflected in the Bible; the respective role of each of these features in the light of Jewish traditions and contemporary research.

JUDS-205 Ancient Near Eastern Literature and the Bible, 3 cr. Mythology, law codes, treaties, wisdom literature of the ancient Near East. Comparisons of their underlying style with Biblical literature.

JUDS-206 Archeology and the Bible, 3 cr. The chronological and cultural setting of Biblical Israel. Readings and discussion on methods of chronology, sites of major excavations, and the remains of sources for a reconstruction of the past.

JUDS-207 Narrative Art in the Bible, 3 cr. An analysis of literary art in shaping the biblical narrative, with specific emphasis on thematic words, imagery, sequence of action, recurrent themes, and structure.

JUDS-210 Ecclesiastes, 3 cr. The language, style, and thought in Ecclesiastes; the relationship to ancient wisdom literature and the problem of skepticism and faith, based on a close reading of the text.

JUDS-212 Psalms, 3 cr. An examination of Hebrew and ancient Near Eastern Hymnology — comparison and contrast. The religion and piety of the Psalms. Types of psalms; their poetic forms and principles.

JUDS-213 Advanced Hebrew, 3 cr. The first course of a two course sequence dealing with Hebrew grammar, composition, and spoken idiom. Readings from contemporary Hebrew literature and Israeli newspapers.

JUDS-216 Hebrew Literature and Language, 3 cr. The first course of a two course sequence. Orientation in a variety of Hebrew literary texts. Emphasis on vocabulary comprehension and oral practice. Written and grammar exercises accompany the readings.

JUDS-225 History of the Jews in Russia, 3 cr. A comprehensive study of the political, economic, communal, cultural, and religious life of the Jews in Russia from antiquity to the present.

JUDS-226 History of Jews in the Countries of Islam, 3 cr. A comprehensive study of the political, social, communal, economic, religious, and cultural life of the Jews in the Muslim countries from the emergence of Islam to the present time.

JUDS-228 History of Zionism, 3 cr. The Jewish Messianic Idea. The "false" Messiahs. The "Love of Zion" movement. From Herzl to Balfour. Zionism and the Holy Land under the British Mandate. The establishment of the state of Israel.

JUDS-229 Mishnah: An Introduction, 3 cr. Selected texts from the tractates of Seder Mo'ed (Festivals); emphasis on acquisition of skill in using the Mishnah as a reference work.

JUDS-243 Music of the Jewish People, 3 cr. Customs and traditions of Jewish music from biblical times to the present. Various styles of religious and secular music; the musical heritage of Ashkenazic, Sephardic, and Hassidic Jewry.

JUDS-245 The Bible as Literature: Pentateuch, Prophets, Wisdom Literature, 3 cr. Selected readings from Hebrew Scripture (in translation): The Pentateuch, Major and Minor Prophets, Wisdom Literature. Literary structures and styles of the various biblical genres.

JUDS-248 Independent Study in Judaic Studies, 2 cr. Individual study under faculty direction. *Prereq.: approval of the department.*

JUDS-249 Independent Study in Judaic Studies, 3 cr. Individual study under faculty direction. *Prereq.: approval of the department.*

JUDS-252 Basic Practices of the Jewish People, 3 cr. The devotional life of the Jewish people: ritual observances and practices; the home, synagogue, holidays, and cycle rites.

JUDS-253 Ideologies of the Jewish People, 3 cr. Contemporary ideology movements: Orthodox, Reform, Conservative, and Reconstructionist Judaism; modern Zionism; issues and changes in American Jewish institutions.

JUDS-255 History of the Jews in France, 3 cr. Survey of French Jewish history, seventeenth century to the present. Medieval roots, Jews of Provence and Alsace, social and cultural history, revolution, enlightenment, and modernization. Anti-semitism, the Dreyfus affair, World War II, and current communal structure.

JUDS-274 Love and Sexuality in Jewish Tradition, 3 cr. Conceptions of love and sexuality in Jewish Scripture and Talmud, in Jewish philosophy, and mystical traditions. Impact of other views on Jewish thought and experience.

JUDS-275 Elie Wiesel: Introduction to His Works, 3 cr. Intensive study of selected fiction and non-fiction; emphasis on relationship between author and his audience, form and function. *Night, Dawn, The Jews of Silence, The Oath, Messengers of God.*

JUDS-276 Moral and Philosophical Themes in Modern Jewish Literature, 3 cr. Examination of writings of selected modern Jewish authors who confront in their works perennial and contemporary philosophical and moral problems, both universal and Jewish. Writers include Kafka, Ansky, Bellow, Singer, Roth, and Kosinski.

JUDS-277 Introduction to Jewish Folklore, 3 cr. Survey of Jewish folklore and folk traditions. Analysis of selected topics in Jewish legend, magic, mysticism, and superstition.

JUDS-282 Biblical Hebrew: Language and Style, 3 cr. Basic vocabulary and grammar of Biblical Hebrew: semantics and syntax; literary devices in prose and poetry; historical and linguistic foundations. Development of skills for reading biblical texts independently. *Prereq.: one year of elementary Hebrew.*

JUDS-295 Contemporary Israeli Poetry in Translation, 3 cr. A survey of Israeli poetry from 1940 to the present. Poets include Gilboa, Gouri, Zach, Amichai, Ravikovitch, Wieseltier and

Wollach. Main themes, varied styles, and the expanding imagination of two generations of Israeli poets. All texts and discussion in English.

JUDS-300 The Prophetic Experience, 3 cr. Examination of the religious and political role of the classical prophets and their messages. Contrast and comparison with other religious phenomena in the ancient and modern worlds.

JUDS-304 The Book of Job, 3 cr. Ancient, medieval, and modern interpretations of Job examined in the light of biblical evidence; the issue of God's justice pertaining to natural or moral evil; survey of ancient parallels to the Job legend.

JUDS-307 Wisdom Literature of the Bible and the Ancient Near East, 3 cr. Nature and content of biblical wisdom as distinguished from the prophetic and legal writings of the Bible; the Wisdom Literature within the setting of the ancient Near East.

JUDS-315 Modern Hebrew Literature, 3 cr. The evolution of the novelistic genre in Hebrew literature. Close reading and analysis of individual works by Brenner, Agnon, Yizhar, Oz, and Yehoshua.

JUDS-316 Modern Hebrew Prose, 3 cr. Short works of Mendele, Steinberg, Peretz, Frishman, Feilerberg, and Bialik. Their historic and cultural background in the late nineteenth and early twentieth centuries.

JUDS-330 History of the Jews in the United States, 3 cr. Beginnings of the Jewish settlement in the New World. Jews in the Colonial and Federal periods. The German Jewish community, 1820-1880. The Civil War and after. The mass immigrations from Eastern Europe. The divided Jewish community, 1880-1924. The Jewish labor movement. Integration of the immigrant community. American Jewry after World War II.

JUDS-331 The Holocaust, 3 cr. A comprehensive study of the events leading to and occurring during the process of the destruction of European Jewry between 1939 and 1945.

JUDS-332 The State of Israel, 3 cr. Historical background. The idea of the Jewish state. The Israel-Arab conflict. The development of the state in its political, social and cultural aspects.

JUDS-333 History of the Development of Jewish Art, 3 cr. The development of Jewish art forms from the biblical period until the present.

JUDS-340 History of Anti-Semitism, 3 cr. Ancient anti-Semitism; Medieval anti-Semitism. Rise of modern anti-Semitism in Europe. The Protocols of the Elders of Zion, racial anti-Semitism, the Holocaust, and anti-Semitism in the Americas.

JUDS-341 The Jew in the Western World, 3 cr. First in a series of three courses dealing with historical, cultural, and religious origins and growth in such areas as: the enlightenment, Hasidism, German and American reform, and orthodox movements.

JUDS-344 Introduction to Jewish Ethics I, 3 cr. First in a series of three courses examining the nature of man's moral behavior, his relationship to other individuals, and his society. Review of Jewish law in relationship to marriage, medicine, politics, and philosophy.

JUDS-351 History of Jewish Mysticism I, 3 cr. First in a series of courses reviewing the inception and development of early Jewish mysticism. The place of the mystical tradition in Jewish thought and practice. Mystical trends in modern philosophy, scientific, literary, political, and theological literature.

JUDS-354 History of Jewish Philosophy I, 3 cr. First course in a two-part series reviewing Jewish philosophy from its

LING-305 Introductory Psycholinguistics, 3 cr. A study of the processes underlying the production and comprehension of language, utilizing the approach of both psychology and linguistics. Topics will 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. An examination of the 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 English. Other topics to be considered are 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. Course is 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. Study of research in a child's acquisition of the ability to recognize and produce the phonemes and morphemes of his/her native language; consideration of the way in which a child comes to know and use syntactical patterns; developmental study of the child's production of syntactic patterns and his/her manipulation of transformations. *Prereq.:* one undergraduate linguistics course.

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-350 Advanced Study in Linguistics, 3 cr. Detailed investigation of a selected area of linguistic specialization, such as syntax, history of the English language, psycholinguistics, etc. *Prereq.:* six credit hours of linguistics.

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, six credit hours of linguistics, English, or a foreign language.

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. *Prereq.:* graduate standing and consent of instructor.

LING-424 Structure of Language, 3 cr. Phonological and grammatical structure of a selected language and its genetic relations to others of its family. *Prereq.:* graduate standing and LING-419 or consent of instructor.

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. The course will consider 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, followed by a 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. A 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; special attention given 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. *Prereq.:* graduate standing, three credit hours of linguistics, or a foreign language.

LING-448 Seminar in Applied Linguistics, 3 cr. Advanced work and individual projects in a selected area of applied linguistics. *Prereq.:* graduate standing and LING-419.

LING-451 Seminar in Historical Linguistics, 3 cr. Advanced work and individual projects in a selected area of historical linguistics. *Prereq.:* graduate standing, LING-411, or LING-419.

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. *Prereq.:* graduate standing; three credit hours of linguistics or consent of instructor.

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 in Linguistics. *Prereq.:* candidacy for the Mater 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 these, especially in English; attention given to the interrelationship between structural and semantic meaning, 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. A survey of techniques that are 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. An introduction to techniques for presentation of English language skills to speakers of other languages. General theories of foreign language teaching, differences in oral-aural skills and reading and writing, evaluation of skills in students, preparation and presentation of material, and cultural problems. *Prereq.:* graduate standing.

LING-482 Second Language Acquisition, 3 cr. A 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. The rationales of various language teaching methodologies and techniques as well as the concepts of transfer and interference, contrastive analysis, and error analysis will be studied. *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. A 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. *Prereq.:* graduate standing, candidacy for the Master of Arts in Linguistics, LING-419 and LING-481.

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 will be asked to examine and evaluate commercially prepared and teacher made materials and lesson plans and to 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 and candidacy for the Master of Arts in Linguistics.

MATHEMATICS

Abdus S. Ansari, Ph.D., Associate Professor
Adam Z. Czarnecki, Ph.D., Associate Professor
Barry Dayton, Ph.D., Associate Professor, Chairperson
Lidia Z. Filus, Advanced Degree, Assistant Professor
David S. Greenstein, Ph.D., Professor
Geraldine Hemmer, M.S., Instructor
Anna-Lise Jensen, Ph.D., Assistant Professor
Joo Koo, Ph.D., Associate Professor

Norman Mittman, M.S., Associate Professor
Anthony A. Patricelli, M.S., Associate Professor
Faustine Perham, Ph.D., Associate Professor
Richard W. Reichhardt, Ph.D., Professor
Rakesh K. Rustagi, 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. Elective courses which have to be approved by the department depend on the specialization selected and the minor, second major, or professional sequence chosen by the student. Contact the Mathematics Department (S-214D) for a copy of the Math Major Handbook for complete details.

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 Department.....		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-121	Foundations of Mathematics	3 cr.
MATH-140	Computing for Mathematicians	3 cr.
MATH-202	Calculus II	4 cr.
MATH-243	Linear Algebra I	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 applicable 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 up to 15 hours of course work in education are allowed, and these hours may apply 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 more courses 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). Each student 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.

Students select electives appropriate to their area of concentration in consultation with their advisor.

The department recommends concentrations in statistics, operations research, and secondary mathematics teaching. Both the statistics and the operations research concentration can provide sound preparation for actuarial mathematics and for two-year college teaching. Students concentrating on secondary education mathematics may choose up to five mathematics education courses. Further details are available from the Mathematics Department.

Depending upon the concentration chosen, students will prepare a thesis, a written project for credit, or a written non-credit project. 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 M.A. 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: (maximum of nine credit hours in education courses) 15 cr.

Select 5 courses from the following:

MATH-401	Number Theory for Teachers	3 cr.
MATH-402	Modern Algebra for Teachers	3 cr.
MATH-403	Modern Geometry for Teachers	3 cr.
MATH-410	Modern Analysis for Teachers	3 cr.
MATH-457	Recent Trends in Mathematics	3 cr.
ELED-403	Problems in Elementary Mathematics Instruction	3 cr.
ELED-414	Principles of Curriculum Development	3 cr.
ELED-418	Classroom Problems in Teaching-Learning Process	3 cr.
Total		30 cr.

A final comprehensive examination in Mathematics is required.

COURSE OFFERINGS

MATH-DEV-090 Introduction to Algebra, 3 cr. (May not be applied towards graduation requirements.) Review of arithmetic skills, such as fractions, decimals, and percent. Geometric concepts and an introduction to algebraic notation. Prereq: placement test.

MATH-DEV-091 Basic Algebra, 3 cr. (May not be applied towards graduation requirements.) Introduction to algebraic expressions, operations, linear equations and inequalities, graphing and polynomials. Systems of two equations and introduction to radicals. Prereq: MATH-DEV-090 or placement test.

MATH-102 Intermediate Algebra, 4 cr. Helps students who have a minimal high school background in mathematics attain the basic technical skills necessary to use mathematics at the college level. Topics include the elements of graphing and coordinate geometry, linear equations and inequalities, simultaneous equations, the algebra of polynomials, factoring, and the conversion of problems stated in sentences to symbolic form. Prereq: MATH-DEV-091 or placement test.

MATH-103 Mathematics for Elementary Teachers I, 3 cr. A 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. Designed 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 to decision problems. Prereq: MATH-102 or placement test.

MATH-121 Foundations of 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-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-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 will be required as well as computer usage. 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. A study of frequency distributions and their use in the decision-making process. Students will be required to use the computer and prepared software. 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 will be required. Prereq: MATH-273 or MATH-275.

MATH-301 Ordinary Differential Equations I, 3 cr. Introduction to differential equations and methods of solution of 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 queuing theory, linear and dynamic programming. Prereq.: MATH-203 and MATH-243.

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, staff guidance. 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 hypothesis. 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. A 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. Both the theory and applications are stressed. **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. 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-370 Workshop in Actuarial Mathematics, 3 cr. Some 300 problems from calculus, classical algebra, mathematical probability, and statistics will be 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. An introduction 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-401 Number Theory for the Elementary School Teacher, 3 cr. Study of topics from number theory applicable in the elementary school, 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 in the elementary school, 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 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, a 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 in the elementary school 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 will be required to use the computer as well as 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. Topics include Hotteling's T, discriminant function, principal components, factor analysis, canonical correlations and cluster analysis. Applications and real data analysis will be stressed. **Prereq.:** graduate standing and MATH-336.

MATH-442 Applied Regression Analysis, 3 cr. Methodology of regression analysis. The central themes of the course are 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 are covered. Applications and real data analysis will be stressed. **Prereq.:** graduate standing and MATH-336.

MATH-443 Experimental Design, 3 cr. The basic topics and ideas in the design of experiments. The design of experiments with a single factor, of experiments with several factors,

Latin Square designs, Graeco-Latin Square designs, plot techniques, factors with two or three levels, the use of confounding. Applications and data analysis will be 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. Topics in Topology. Possible topics include homology and homotopy theory, plane topology, curve theory, function spaces, advanced topics in point set topology. **Prereq.:** graduate standing and MATH-421.

MATH-463 Advanced Topics in Complex Variables, 3 cr. Topics in the advanced theory of complex variables. 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. **Prereq.:** graduate standing and MATH-328.

MATH-464 Advanced Topics in Real Analysis, 3 cr. Topics in real analysis. Possible topics include measure and integration, functional analysis, Banach algebras, topological groups, calculus of variations, constructive real analysis, non-standard real analysis. **Prereq.:** graduate standing and MATH-326.

MATH-465 Advanced Topics in Numerical Analysis, 3 cr. Topics in numerical analysis. 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. **Prereq.:** graduate standing and MATH-304.

MATH-466 Advanced Topics in Geometry, 3 cr. Topics in geometry chosen according to the needs and interests of the students. Possible topics include projective geometry, metric geometry, differential manifolds, finite geometries. **Prereq.:** graduate standing and MATH-421.

MATH-467 Advanced Topics in Algebra, 3 cr. Topics in algebra. Possible topics include group theory, ring theory, field theory, linear algebra, categorical algebra and lattice theory. **Prereq.:** graduate standing and MATH-436.

MATH-469 Advanced Topics in Mathematical Statistics, 3 cr. Topics in statistics chosen according to the needs and interests of the students. Possible topics include simultaneous stochastic equations models, multivariate analysis, analysis of variance and covariance, non-parametric statistics, Bayesian inference, and sampling theory. **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. The course emphasizes problem solving and develops an acquaintance with a variety of modeling approaches that are widely used. 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. Topics in operations research. Possible topics include applied graph theory; simulation analysis of complex systems; times series analysis. **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; staff guidance. **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 will prepare a project involving analysis of real data using both the theory and computational tools learned in their concentration. Students will present both written and oral reports to the department. The purpose of the project is for students to demonstrate competence as practitioners in their area of applied mathematics. **Prereq.:** acceptance to degree candidacy for the Masters in Mathematics, and approval of the department.

MUSIC

Charles A. Anderson, D.M.A., Professor
Virginia J. Barnett, M.M., Assistant Professor
Harold E. Berlinger, D.F.A., Professor
Ronald Combs, D.M.A., Professor
Helen J. Engler, M.M., Assistant Professor, Chairperson
Libby Komaiko Fleming, B.A., Instructor
Edgar Gangware, Ph.D., Professor
Aaron Horne, D.M.A., Professor
Phyllis Hurt, M.M., Assistant Professor
Sylvie L. Koval, M.M., Associate Professor
James A. Lucas, D.M.A., Professor
Vincent Malek, Ph.D., Professor
Michael McClary, M.M., Assistant Professor
Marie McGuckin, M.M., Assistant Professor
Vincent Oddo, Ph.D., Professor
Elyse J. Peirick, Ph.D., Professor
William Schutt, M.M., Associate Professor
Constance J. Speake, D.M.A., Associate Professor
Richard D. Wenzlaff, D.F.A., Professor

The Department of Music offers undergraduate and graduate programs which enable students to participate in creative and functional experiences while acquiring understanding of historical/theoretical analysis, compositional/performance techniques, and critical/aesthetic aspects of music and dance as fine arts and as basic forms of communication.

Freshmen entering a major program in music are assumed to have acquired experience in performing with school groups and/or as soloists, basic music reading ability, and sensitivity to music. Those without such backgrounds will have to complete additional preparation which may extend the time to graduation beyond the normal period.

The major in music offers a choice of six areas of emphasis and is designed to meet many needs: as background for personal enrichment and general use; to prepare for professional music careers; to prepare for further study in formal graduate programs; to prepare for studio or private teaching; to prepare for teaching music in the secondary schools.

There are three minor programs: (1) music, as part of the elementary education major; (2) an individualized minor in music; (3) an individualized minor in dance.

Music majors are required to file appropriate forms in the department office requesting assignment to the various programs and to an advisor. In addition to meeting all course requirements, music majors must attend at least three department sponsored recitals or concerts during each of the fall and winter trimesters, and two during the spring/summer trimester. Music majors participating in a concert program sponsored by a university performing group will receive one-half attendance credit. A total of no more than two full attendance credits may be earned through program participation. All performance majors must give a senior recital or take an extended jury.

Students may enroll in no more than three ensembles in each trimester.

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 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 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 from Psychology,
Music Theory, or Music History and Literature
in consultation with advisor) 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.

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&I-SCED-303 Methods and Techniques of
Teaching Music in the Secondary Schools 3 cr.

MUS-393L Workshop 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 Education 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.

MUS-113 Class Piano II, 2 cr. Continuation of Class Piano I. Expanded theoretical concepts and keyboard technique. Outside practice required. *Prereq.:* MUS-112 or consent of instructor.

MUS-114 Class Piano III, 2 cr. Development of keyboard skills in all major and minor keys. Introduction to piano literature of diverse styles. Outside practice required. *Prereq.:* MUS-113 or consent of instructor.

MUS-221 Chorus, 1.5 cr. With instructor's consent, this activity is open to all students. Opportunities will be provided for school and public performance.

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 basic techniques of playing the various 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. Designed to develop basic skills in playing the guitar. Students will be introduced to 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. Writing and playing of primary triads and their inversions and the dominant seventh chord. Aural skills. *Prereq.:* MUS-104 and consent of instructor.

MUS-122 Music Theory II, 3 cr. Writing and playing of the inversions and derivations of the dominant seventh chord, or six-four chords, and of non-chord tones in harmonizations of basses and melodies, melodic writing and harmonic rhythm. Sight-singing and ear-training related to written skills. *Prereq.:* MUS-121.

MUS-123 Class Guitar II, 2 cr. Continuation of Class Guitar I. Students will study more complex and varied chord formations and strumming techniques, note reading of more difficult melodic lines, as well as the basics of classical guitar technique. *Prereq.:* MUS-120 or consent of instructor.

MUS-124 Sight-Singing and Ear Training I, 2 cr. Designed to develop music-reading and related aural/oral skills through practice and application of sight-singing techniques and ear training procedures. *Prereq.:* MUS-121 or consent of instructor.

MUS-125 Sight-Singing and Ear Training II, 2 cr. Designed to further develop music-reading and related aural/oral skills through practice and application of sight-singing techniques and ear-training procedures. *Prereq.:* MUS-124 or consent of instructor.

MUS-127 Harmony and Ear Training at the Keyboard I, 2 cr. Designed to develop 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. Designed to further develop skills in applying harmonic and

melodic concepts and techniques at a keyboard instrument. *Prereq.:* MUS-127 or 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. Harmonization of basses and melodies involving seventh chords and their inversions; mixtures of major, minor and other modes; secondary dominants and subdominants; diatonic modulation; harmonic analysis. *Prereq.:* MUS-122 or consent of instructor.

MUS-202 Music Theory IV, 3 cr. Writing, using chromatic mediant, augmented-sixth chords and other altered chords; chromatic and enharmonic analysis. *Prereq.:* MUS-201 or consent of instructor.

MUS-203 Music Before 1600, 3 cr. A 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. A survey of musical styles, types, and forms as found in the works of representative composers of the Baroque and Classical Periods. *Prereq.:* MUS-104, MUS-121, or consent of instructor.

MUS-205 Music After Beethoven, 3 cr. A survey of musical styles, types, and forms, as found in the works of 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. Development of discriminative listening and aesthetic sensitivity to musical styles and forms in Western civilization and other cultures through lectures, discussions, readings, recordings, and attendance at musical performances. *Prereq.:* MUS-104 or consent of instructor.

MUS-221A University Chorus, 1.5 cr. With instructor's consent, this evening chorus is open to enrolled students and members of the community.

MUS-222 Vocal Ensemble, 1.5 cr. Opera Workshop, Chamber Singers, and Madrigal Singers. With instructor's consent these activities are open to all students. Opportunities will be provided for school and public performance.

MUS-223 Instrumental Conducting, 2 cr. The techniques of conducting and score reading; rehearsal techniques and interpretation. *Prereq.:* MUS-122 or consent of instructor.

MUS-224 Choral Conducting, 2 cr. Designed to develop choral conducting techniques, the ability to read and analyze choral scores, and the knowledge of choral repertoire. *Prereq.:* MUS-122 or consent of instructor.

MUS-231 Band, 1.5 cr. With instructor's consent, this activity is open to students who have instrumental experience. Opportunities will be provided for school and public performance.

MUS-231A Wind Band, 1 cr. Restricted Wind Ensemble playing advanced literature. *Prereq.:* consent of instructor.

MUS-234 Instrumental Ensemble, 1 cr. With instructor's consent, this activity is open to all students who have instrumental experience. Opportunities will be provided for school and public performance.

MUS-235 Instrumental Ensemble, 1.5 cr. Restricted Ensemble playing advanced literature. Opportunities will be provided 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, along with 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. Several approaches to structural analysis will be considered. *Prereq.:* MUS-305 or consent of instructor.

MUS-307 Class Composition, 3 cr. Designed to afford students an opportunity for creative expression in music through the composition and performance of 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. Studies of selected topics in instrumental literature. *Prereq.:* MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-310 Studies in Vocal Music, 3 cr. Studies of selected topics in vocal literature. *Prereq.:* MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-311 Studies in Keyboard Music, 3 cr. Studies of selected topics in keyboard literature, including dance types, character pieces, variations, prelude, fugue, toccata, suite, and sonata. *Prereq.:* MUS-122, MUS-203, MUS-204, MUS-205 or consent of instructor.

MUS-312 Beethoven, 3 cr. A study of 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, i.e., MUS-314A, The History of Black Music in America, and MUS-314B, Music of the Jewish People. *Prereq.:* junior standing.

MUS-315 Bach and Handel, 3 cr. An analysis of representative vocal and instrumental compositions of both composers. A 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. An analysis of representative vocal and instrumental compositions of both composers. A 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 of structural, stylistic and formal aspects of the musical art of the Romantic era from a historical point of view. *Prereq.:* MUS-122, MUS-203, MUS-204 or MUS-205, or consent of instructor.

MUS-318 Music of the Twentieth Century, 3 cr. Consideration of structural, stylistic and formal aspects of the musical art of the twentieth century from a historical point of view. *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; staff guidance. *Prereq.:* consent of instructor.

MUS-321 Seminar in Music History, 3 cr. Intensive studies of specialized topics. *Prereq.:* consent of instructor.

MUS-322 Independent Study in Music, 3 cr. Individual investigation into a topic of the student's choice; staff guidance. *Prereq.:* consent of instructor.

MUS-323 Music of the Renaissance Era, 3 cr. Consideration of structural, stylistic, and formal aspects of the musical art of the Renaissance Era from a historical point of view. *Prereq.:* MUS-122, MUS-203, MUS-204, or MUS-205, or consent of instructor.

MUS-324 Independent Study in Music, 2 cr. Individual investigation into a topic of the student's choice; staff guidance. *Prereq.:* consent of instructor.

MUS-325 Performance Seminar, 2 cr. Provides opportunities for class members to perform and to become involved in a critical analysis of other performances based upon stylistic, structural, and technical factors. *Prereq.:* consent of instructor.

MUS-328 Repertoire Seminar, 2 cr. A survey of the standard repertoire for the different performance areas. Content varies according to performance area studied. *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, and careful attention to interpretation of selected repertoire. *Prereq.:* MUS-223.

MUS-331 Applied Music Pedagogy I, 3 cr. Designed to prepare the prospective teacher and serve the experienced teacher. *Prereq.:* twelve credit hours of Applied Music or consent of instructor.

MUS-332 Applied Music Pedagogy II, 2 cr. Designed to function primarily as a practicum for the prospective or experienced teacher; class discussion, practice teaching. *Prereq.:* MUS-331 or consent of instructor.

MUS-333 Internship in Music, 3 cr. A field experience course designed by the student to meet his/her needs and interests in both the traditional and non-traditional areas of music. Internships may be served in schools, community organizations, and industry. Information concerning areas for internships and application forms are 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. Development of fundamental concepts and analysis of scores 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. Emphasis on development of individualized styles for students seeking to extend techniques learned in Jazz Arranging I. 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. A workshop course 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; an adaptation of 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. *Prereq.:* in-service teacher, or consent of instructor.

MUS-394 Seminar in Music Education, 3 cr. see MUS-393 for description. *Prereq.:* in-service teacher, or consent of instructor.

MUS-396 Practicum in Music, 1 cr. Concentrated study of specific aspects of music performance, music theory, or music history and literature. *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; staff guidance. *Prereq.:* graduate standing and consent of instructor.

MUS-421 Independent Study in Music, 2 cr. Individual investigation into a topic of the student's choice; staff guidance. *Prereq.:* graduate standing and consent of instructor.

MUS-422 Independent Study in Music, 3 cr. Individual investigation into a topic of the student's choice; staff guidance. *Prereq.:* graduate standing and consent of instructor.

MUS-424 Music Bibliography and Research, 3 cr. A study of basic reference and research materials in music and an 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 development of performing skills and musical understanding; 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 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 various aspects of twentieth century music. *Prereq.:* graduate standing and consent of instructor.

MUS-480 Graduate Internship in Music, 3 cr. Advanced field experience course designed by the student to meet his/her needs and interests for 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 conducting research and writing a thesis or preparing a recital to fulfill requirements for the master of music degree. *Prereq.:* master's degree candidacy in music.

MUS-491 Seminar in Research in Music Education, 3 cr. A study of basic reference and research materials in music education and an introduction to methods of research appropriate to music education. *Prereq.:* graduate standing.

MUS-492 Seminar in Administration and Supervision of School Music, 3 cr. A course to familiarize the student with the full 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. A study of the 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-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. An introduction to the three types of Spanish dance: Classical, Regional and Flamenco with emphasis on basic technique as well as studies of Spain's varied music; Classical, Flamenco and Regional from the 13th through the 20th centuries.

MUS-DANC-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.

MUS-DANC-161 Spanish Dance I, 2 cr. As a sequential extension of the Introduction to Spanish Dance, this course will deal more intensively with the technique and style of the three types of dances. There will be a definite 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.

MUS-DANC-203V Field Experiences: Dance in Chicago II, 3 cr.

MUS-DANC-203W Field Experiences: Hispanic Dance I, 3 cr.

MUS-DANC-204 Dance Ensemble, 3 cr. Dance Ensemble activities are open to all students demonstrating at least intermediate level of dance technique (ballet, modern, jazz, or combination). Opportunities will be provided for school and public performance. *Prereq.:* consent of instructor.

MUS-DANC-251 Modern Dance I, 2 cr. Practice through dance techniques of the principles of movement as an art form that suggests ideas and conveys feelings, including axial and locomotor movements, spontaneous and planned interpretive response, and choreography.

MUS-DANC-252 Folk, Round and Square Dance, 1 cr. Developments of knowledge and skill in folk, national, and square dances, experience in 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 ballroom dances, developing a finer sense of rhythm, greater adeptness, comprehension; opportunity to design routines.

MUS-DANC-254 Modern Dance: II, 2 cr. Designed for students with some background in dance. Classes will have exercises to develop strength, flexibility, coordination, and balance. There will be locomotor combinations of basic skills and creative exploration of the special 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 student who is beginning to study dance. Students who have had some dance training will enjoy becoming familiar with jazz styling, a dramatic expression of today's sounds and feelings. Many elements of jazz are included: 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. Students are encouraged to attend performances of visiting ballet companies. Films and video-tape are used for analysis.

MUS-DANC-261 Spanish Dance II, 2 cr. As a continuation of Spanish Dance I, this course will further explore the Classical, Regional and Flamenco styles. Emphasis will be placed on mastery of technique and important repertory styles; their music and theatrical history. *Prereq.:* MUS-DANC-161 or consent of instructor.

MUS-DANC-351 Modern Dance: Advanced, 3 cr. Designed for students approaching advanced levels of skill in modern dance. Major emphasis is placed on achievement of excellence related to the techniques of Graham, Limon, and Cunningham. Students will attend professional dance presentations and rehearsals of professional companies, and research their historical backgrounds. *Prereq.:* MUS-DANC-254 or consent of instructor.

MUS-DANC-355 Jazz Dance II, 2 cr. Jazz Dance II presents the second development level of jazz dance technique. With a base in the fundamentals of jazz dance, the student is now ready to progress toward a more polished technique and eventually toward greater expression through movement. Many elements of Jazz are used: 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 Ballet I. While essentially a technique course for the beginning student,

Ballet II seeks to develop greater 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 II. Individual progress is made through the discipline of ballet toward greater strength, flexibility, balance, stamina, adagio, allegro, and center work. Expressive and creative elements of ballet are explored. *Prereq.:* MUS-DANC-256 and MUS-DANC-356.

MUS-DANC-360 Dance Composition, 3 cr. Emphasis is placed on practical aspects of dance design and theoretical aspects of dance as an art form. Materials presented by Louis Horst in both Pre-Classic Forms and Modern Forms are utilized. Creation of dance compositions is a required component of the course work. *Prereq.:* consent of instructor.

MUS-DANC-365 Costuming and Cosmetology for Dance, 3 cr. This course is designed to complement the dance minor sequence and more fully prepare the student for the production of dance. Because so many aspects of costuming and cosmetology for dance relate to the safety of the dancer, this specialized course is essential for every student.

MUS-DANC-370 Musical Resources for Dance, 3 cr. A historical survey of music composed especially for dance. Music sources of particular interest to the dancer and/or choreographer are examined including original scores and recordings, reproductions, contemporary recordings made with original instruments, useful re-releases, etc. Major periods of history and style are studied 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. This course examines the nature of dance with overviews of the historical interrelatedness of dance with other art forms: poetry, drama (opera), painting, and music. An introduction to basic concepts of aesthetics is given. The role of the critic is also considered. *Prereq.:* consent of instructor.

MUS-DANC-380 Contemporary Dance Education, 3 cr. Application of educational methods to the field of dance. Analysis of teaching techniques for dance as applied to various settings, i.e., conservatory and community, and specific age and interest groups.

MUS-DANC-382 Dance Management and Grantsmanship, 3 cr. All aspects of dance management, i.e., financing, including types of insurance, ownership types, taxes, varieties of management problems, and problems relating to the acquisition of various kinds of grants for the purpose of providing sufficient kinds of support for diverse dance programs. *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. The course is designed by the student, a dance faculty advisor, and generally an off-campus agent. Internships may be served in arts agencies, dance companies, community organizations, and arts-related industries. *Prereq.:* consent of instructor.

NATURAL SCIENCE

Herbert J. Stoltze, Ed.D., Professor of Biology, Coordinator

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 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.

PHILOSOPHY

Roger J. Chacon, Ph.D., Associate Professor
Sarah L. Hoagland, Ph.D., Associate 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 perennial 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 on none other than 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/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: (1) to contribute significantly to the liberal education of university students; and (2) to provide majors with preparation for advanced studies in their chosen field, as well as with the benefit of that unique training (described above) that is increasingly being sought by institutions and corporations in the nonacademic world.

UNDERGRADUATE PROGRAMS

Major in Philosophy for the Bachelor of Arts Degree

The major in philosophy, leading to the Bachelor of Arts degree, prepares the student for graduate work.

Majors must maintain a 3.5 grade point average in philosophy courses.

Required Courses:

PHIL-201	Logic I	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.
Nine hours of electives at the 300-level		9 cr.
Additional electives		6 cr.
Total		30 cr.

Minor in Philosophy (18 cr. hrs.)

Required Courses:

One course in the history of philosophy		3 cr.
Two courses at the 300-level		6 cr.
Electives		9 cr.
Total		18 cr.

All transfer students majoring in philosophy must complete a minimum of 15 credit hours of course work in philosophy at Northeastern; minors must take a minimum of nine credit hours at Northeastern.

COURSE OFFERINGS

PHIL-101 Persuasion and Reason, 3 cr. An introduction to the study of informal fallacies, persuasive devices, semantic pitfalls, rational vs. emotional appeals, and the techniques used in evaluating arguments.

PHIL-102 Introduction to Philosophy, 3 cr. An introduction to the main problems of philosophy, e.g. knowledge, reality, morality, religion, and art.

PHIL-103 Philosophy and Contemporary Issues, 3 cr. An examination of the philosophical basis of selected contemporary issues, controversies, and movements; the topic or topics selected will be announced in the schedule of classes.

PHIL-104 Arguing Philosophically, 3 cr. Specialized instruction and practice in recognizing argument in prose as well as in articulating, evaluating and substantiating opinion with argument through oral and written presentation.

PHIL-105 Feminist Philosophy, 3 cr. An 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. An introductory course in symbolic logic, dealing with the propositional calculus, quantification theory, and the logic of relations and classes.

PHIL-202 Comparative Religion, 3 cr. A comparative study of the main tenets and features of the major religions of mankind, principally Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL-211 Philosophy of Religion, 3 cr. A philosophical scrutiny of some of the central themes in religion, e.g. 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. The topic or topics selected will be announced in the schedule of classes.

PHIL-213 Ethics, 3 cr. An 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. A 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. A critical survey of the development of philosophy in the West from the pre-socratics to Plotinus.

PHIL-231 History of Medieval Philosophy, 3 cr. A 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. A 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. An 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. A 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. A 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. A study of theories about the meaning and justification of moral judgments. Further topics may include: 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 scepticism. Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-332 Contemporary Philosophy, 3 cr. A 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. An 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, cr. An intensive study of important problems, topics, or thinkers in nineteenth-century philosophy stressing their relevance to twentieth century concerns. The topics selected will be announced in the schedule of classes. Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-335 Analytic Philosophy, 3 cr. A 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. An intensive study of selected works of existentialist thinkers such as Kierkegaard, Nietzsche, Sartre, Camus, and others. Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-341 Metaphysics, 3 cr. A 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. A 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 the 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. An 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. An 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. A systematic examination of one important contemporary issue, controversy, or problem; the topic selected will be announced in the schedule of classes. Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-363 Topics in Philosophy of Religion, 3 cr. An intensive study of an important problem, period, or thinker in the philosophy of religion. The topics selected will be announced in the schedule of classes. Prereq.: one course in philosophy, junior standing, or consent of instructor.

PHIL-371 Theory of Knowledge, 3 cr. A 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. An 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. An 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 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 of junior status or higher. Prereq.: consent of instructor.

PHIL-383 Seminar in Philosophy, 3 cr. An intensive study of one important philosopher, problem, school, or period; the topic selected will be announced in the schedule of classes. Prereq.: major in philosophy or consent of instructor.

PHYSICS

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 PHYS-TECH 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 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-337	Modern Physics Laboratory	2 cr.
PHYS-339	Intermediate Physics Laboratory	2 cr.
PHYS-393	Electronics	3 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.
either 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.

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 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 Physics Seminar 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. This course deals with 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 with no previous formal mathematics or science background. Physics and its application to the problems of energy consumption and production will be discussed. Topics include the effects of nuclear reactors and their need, 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. This course focuses on the central concepts of physics (the laws of mechanics and electricity, the properties of light, atoms and nuclei) and shows 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. Particular emphasis is placed on the interpretation of physical equations and the solution of simple numerical problems. This course is intended especially for students planning to take PHYS-201. **Prereq:** MATH-106.

PHYS-201 College Physics I, 3 cr. Kinematics and dynamics of particles, Newton's laws, kinetic and potential energy, conservation of energy, momentum and angular momentum, gravitation and heat. **Prereq:** MATH-106 or consent of departmental advisor.

PHYS-202 College Physics II, 3 cr. Electrostatics, Coulomb's Law, electric fields, electric potentials, currents, Ohm's Law, magnetism, magnetic fields, the forces due to moving charges, magnetism and charges in motion, induction, electromagnetic radiation, wave motion, physical and geometrical optics. **Prereq:** PHYS-201.

PHYS-203 Physics I Laboratory, 1 cr. A 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.

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 are

discussed. **Prereq:** PHYS-206 and either PHYS-202 or one year of high school physics.

PHYS-215 Physics III, 3 cr. An introduction to the physics of the twentieth century, including applications in related fields such as biology, chemistry, and earth science. The course covers special relativity, wave nature of matter; molecular, and nuclear phenomena; solids and crystal structure. **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 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 fully 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 and for physics majors only; PHYS-309.

PHYS-324 Advanced Classical Physics, 3 cr. An 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-331 Optics, 3 cr. The fundamental principles of geometrical and physical optics and their application to the design of modern instruments are studied and demonstrated in detail. Also included are atomic spectra, properties of photons, and lasers. **Prereq:** PHYS-202 or PHYS-207, PHYS-204, and MATH-202.

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. The experimental evidence for the wave properties of light is reviewed and atomic spectra and electron spin, elementary wave mechanics, the hydrogen atom, the properties of many electron atoms and the periodic table, the structure of molecules are discussed. **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:** to be taken concurrently with PHYS-336.

PHYS-338 Modern Physics II, 3 cr. Second part of a two trimester sequence dealing with quantum physics. Primary emphasis is placed 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-339 Intermediate Physics Lab, 2 cr. A series of experiments in the fields of optics, electronics and atomic, solid state, and nuclear physics. The experiments will be chosen according to the individual student's needs and interests. This course may be taken up to three times. *Prereq:* junior standing.

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 per week. This course may be taken up to three times. *Prereq:* sixteen credit hours of physics courses and consent of department.

PHYS-391 Astronomy, 3 cr. The course covers the following topics: the planets including earth, sun, moon, energy of stars, spectra, evolution of stars, certain special types of stars, the Milky Way, and galactic systems. *Prereq:* PHYS-201.

PHYS-393 Electronics, 3 cr. L, R, and C as impedances, frequency response, networks, transients, amplifiers, oscillators, transistors, and digital circuits. *Prereq:* PHYS-202 and PHYS-204.

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 Schroedinger 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, Schroedinger'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 measurement and analysis of scientific data: feedback control (servo) systems, operational amplifiers, analog computation, digital circuits and systems including microprocessors. *Prereq:* graduate standing, PHYS-393, 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. Special emphasis is 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 are included. *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 Riemanian 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. The 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. A presentation of 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. *Prereq:* graduate standing and consent of instructor.

Physics Technology

PHYS-TECH-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-TECH-362 Materials II: Electronic and Optical Properties, 3 cr. A continuation of Materials I. Primary emphasis is placed 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-TECH-365 Microprocessor Electronics, 3 cr. For both hobbyist and professional, the course is designed to provide hands-on laboratory experience in interfacing the microprocessor with the outside world, together with the rudiments of programming in machine code to effectively accomplish the aims of the interfacing goal. The Motorola 6800 microprocessor is used as a principal example and the techniques are extended to other

microprocessors. Lecture 2 hours, lab 2 hours. *Prereq:* PHYS-393 or consent of instructor.

PHYS-TECH-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-393 or consent of instructor.

PHYS-TECH-367 Transducer and Special Purpose Electronics, 3 cr. The course will cover thermostats, thermocouples, strain gauges, piezoelectric effect, pressure measurement, photocells, microphones, audio systems, electromechanical devices, control systems, feedback, closed loop systems, and remote sensing devices. Lecture 2 hours, lab 2 hours. *Prereq:* PHYS-393 or consent of instructor.

PHYS-TECH-369 Instrumentation Electronics, 3 cr. Review of basic electronics, measuring instruments, power supplies, transistor amplifiers, feedback, oscillators, operational amplifiers, computational amplifiers, and practical instrument systems, including applications of microprocessors. Lecture 2 hours, lab 2 hours. *Prereq:* PHYS-393 or consent of instructor.

POLITICAL SCIENCE

Ellen Cannon, Ph.D., Associate Professor
Shirley Castelnuevo, Ph.D., Professor
Asad Husain, Ph.D., Professor
John J. Murphy, M.A., Professor
Charles Pastors, Ph.D., Professor
Zahid Shariff, D.P.A., Professor
Valerie Simms, Ph.D., Professor, Chairperson
Bette S. Tallen, Ph.D., Associate Professor
Kusol Varophas, Ph.D., Professor
Shu-Shin Wang, Ph.D., Assistant Professor

The Department of Political Science believes that all basic issues of society are fundamentally political; therefore, an understanding of political life is indispensable for any well-educated person. The department currently offers undergraduate majors and minors 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 trimester and to become well acquainted with the Handbook for Political Science Majors available in the departmental office.

The Constitution examination required for graduation may be satisfied by taking either of the following courses:

PSCI-COMP-211 Comparative Political Systems 3 cr.
PSCI-AMER-216 American National Government..... 3 cr.

These courses are 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 the department. Courses in which students receive a grade of "D" may not be counted toward the major.

Required Courses:

Two introductory courses selected from: 6 cr.
PSCI-IR-201 Introduction to World Politics **or**
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 Science 3 cr.
(PSCI-210 must be among the first four political science courses taken.)

Eight 300-level courses 24 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.

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 proposing 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, taken, 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 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.

The majority of 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-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.

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-371 Topics in Political Science, 1 cr. Exploration at the advanced level of current issues and special concerns in political science. Consult the schedule of classes for topics.

PSCI-372 Topics in Political Science, 2 cr. (See PSCI-371 for description.)

PSCI-373 Topics in Political Science, 3 cr. (See PSCI-371 for description.)

PSCI-374 Topics in Political Science, 4 cr. (See PSCI-371 for description.)

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. One seminar meeting per week with instructor. *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 will 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. Topics vary. Consult the schedule of classes for relevant information. *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 will provide 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. Guidance of students conducting research and writing a thesis to fulfill the requirements 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 of 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-101 Introduction to American Politics, 3 cr. General introduction to American politics. The course focuses on current political issues and events at the city, state and national levels. Basic concepts and methods of analysis are introduced.

PSCI-AMER-216 American National Government, 3 cr. Description and analysis of national political institutions and

processes. Current issues and problems of American government. Not open to majors in their senior year.

PSCI-AMER-301 Legislative Process, 3 cr. Introduction to the legislative process: problems of representation, organization of the legislature, participation in the legislative process, and legislature in action, and proposals for improved organization and performance; emphasis on legislatures at the national level. *Prereq.: PSCI-AMER-216 or consent of instructor.*

PSCI-AMER-303 Public Opinion, 3 cr. Examination and analysis of public opinion as related to the political behavior of leaders and followers. Emphasis on voting behavior, opinion surveys, techniques of opinion manipulation for political purposes, and the role of opinion in policy-making. *Prereq.: PSCI-AMER-216 or consent of instructor.*

PSCI-AMER-304 Constitutional Law: The Supreme Court's Role in American Government, 3 cr. Constitutional development, judicial review, and separation of powers; the historical and political context of constitutional law doctrines; crucial Supreme Court cases will be examined. *Prereq.: PSCI-AMER-216 or consent of instructor.*

PSCI-AMER-305 Constitutional Law: Civil Liberties, 3 cr. The role of the Supreme Court and its impact on the constitutional development of the due process clause, civil liberties, the first amendment freedoms, and the equal protection of the laws will be traced. Particular emphasis will be placed in 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-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. Special attention will be given to the role of groups as representative agents and their functioning as facilitators or resistors with regard to social change. *Prereq.: PSCI-AMER-216 or consent of instructor.*

PSCI-AMER-310 The American Political System, 3 cr. Advanced analysis of American government with emphasis on analytical models, general systems theory, current behavioral research, contemporary critiques, and the values and biases implicit in the system. *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 through study of major ideological perspectives; 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. The course will investigate a feature of the American political process, an important development in the study of American politics, or the politics of a specific policy area. For example, the course might study the presidential election process, the development of voting behavior studies, or the politics of national health care. Consult current schedule of classes for 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 will be examined. Contemporary problems of the Presidency and the bureaucracy will be explored. *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-353 Practical politics, 3 cr. An examination of contemporary politics with emphasis on the role of politicians and the realities of political life. *Prereq.: three credits in political science.*

PSCI-AMER-358 The Judicial Process, 3 cr. Analysis of the judicial policy-making process in light of recent behavioral research into such factors as backgrounds, attitudes, and ideologies of judges; nature of the selection process; role of pressure groups, and intra-court politics of the systems. *Prereq.: PSCI-AMER-216 or consent of instructor.*

PSCI-AMER-380 Courts, Judges and Politics, 3 cr. An examination of the decision-making process and a consideration of the problems of social choice in judicial policy-making; analysis of the impact of information, power, resources, organizational structure, and the environment on the political implications of judicial actions. Alternative models of choice and their implication for trial courts will be explored. *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. Emphasis will be placed 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 the 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 grants-in-aid. **Prereq.:** PSCI-PA-332 or consent of instructor.

PSCI-PA-375 Public Personnel Administration, 3 cr. Examination of the 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. Governmental policy and program implementation will be studied 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. Standard summaries of the development of the discipline and primary, classical sources will be read. Key theorists and concepts of the discipline will be discussed. **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. An 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 on federalism, 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-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 will be examined and analyzed. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-341 Governments in Asia, 3 cr. Comparison of Asian political systems, including Communist 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. Attention will be given 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 topics. **Prereq.:** PSCI-ASIA-211 or consent of instructor.

PSCI-ASIA-346 Political Doctrines of Asia, 3 cr. The origins of indigenous political doctrines of Asian countries, and their reaction to outside influences such as colonialism, capitalism, socialism, and communism. **Prereq.:** PSCI-COMP-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-376 Japan: The Traditional Political Scene, 3 cr. The role and function of the traditional political institutions in Japan with respect to use of power by the ruling class and the development of Japan as a modern state; outside influences on the system mainly in the form of Chinese institutions. **Prereq.:** PSCI-COMP-211 or consent of instructor.

PSCI-ASIA-377 Japan: The Modern Political Scene, 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. **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 will be exposed to a substantial portion of South Asian political literature; discussion, oral and written presentations. **Prereq.:** master's 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. Not open to majors in their senior year.

PSCI-COMP-312 Modern European Governments, 3 cr. Comparative study of the politics and government 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-Sahara Africa, 3 cr. An examination and comparison of the politics of selected African states; particular emphasis will be placed on the 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 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. The 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. An 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, 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 will be considered as well as political and economic structures pertinent to gender distinctions. The approach will be comparative. **Prereq.:** PSCI-COMP-211 or consent of instructor.

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-314 The United Nations and the World Order, 3 cr. Origin and development of the United Nations; its problems concerning membership, representation, procedures for pacific settlement, sanctions, peace-keeping and financing; activities of UN's specialized agencies. **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 and Organizations, 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 will be treated in their political, social, economic and strategic dimensions.

PSCI-IR-328 International Terrorism, 3 cr. Investigation of terrorism, beginning with the problem of definition. The origins and evolution of terrorism will be treated, as will the 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 topics. *Prereq.:* PSCI-IR-313 or PSCI-IR-364.

PSCI-IR-364 Principles of International Relations, 3 cr. The 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 world-wide 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. An 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 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 of the socio-psychological approaches to the study of international relations; topics to be covered include nationalism in international conflict resolution, 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 will be examined through selected writings of twentieth century political philosophers. Particular emphasis will be placed 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 the selected writings of the following theorists and activists: Franklin, Adams, Jefferson, Hamilton, Madison, Calhoun, de Toqueville, Emerson, Thoreau, Douglass, Grimke, Garrison, Fitzhugh, 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 topics. *Prereq.:* PSCI-THRY-213 or consent of instructor.

PSCI-THRY-335 Political Theory: Individual and the State, 3 cr. An analysis of the concept of a political community in terms of obligations, rights, the public interest, the just state, and the just individual. *Prereq.:* PSCI-THRY-213 or consent of instructor.

PSCI-THRY-336 Political Theory: Individual and Society, 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 others. *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 will be examined through selected writings of important African leaders and writers dealing with political development in the new states of Africa. Particular focus will be placed 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; basis for moral values, political obligation, the nature of state, 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

Peggye Anderson, Ph.D., Associate Professor
Bernard M. Aronov, Ph.D., Professor
Margaret E. Condon, Ph.D., Professor, Chairperson
Hubert Dolezal, Ph.D., Professor
Arnold W. Gordon, M.S., Assistant Professor
Ernest Kurtz, Ph.D., 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
Terry Schuepfer, Ph.D., Assistant Professor
Christy C. Shervanian, Ph.D., Professor

The Department of Psychology offers courses leading to a Bachelor of Arts degree in psychology. The department prepares students for pursuing careers in those fields that make particular use of a knowledge of human behavior and development. These include human resource and personnel positions in industry, direct service workers 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 and also 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 information 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 also 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 Psychology	4 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 Lab	3 cr.
PSYC-325A	Laboratory, Research Methods:	
	Child Development	3 cr.
PSYC-325B	Laboratory, Research Methods:	
	Personality Development	3 cr.
PSYC-354	Physiological Psychology Lab	3 cr.
PSYC-360	Laboratory, Research Methods:	
	General	3 cr.

PSYC-361	Laboratory Research Methods:	
	Clinical/Social	3 cr.
PSYC-362	Laboratory Research Methods:	
	Perception and Cognition	3 cr.
PSYC-363	Laboratory Research Methods:	
	Tests and Measurements	3 cr.

Select three of the following		9 cr.
PSYC-215	Introduction to Humanistic Psychology	3 cr.
PSYC-301	Developmental Psychology	3 cr.
PSYC-311	Psychology of Personality	3 cr.
PSYC-312	Abnormal Psychology	3 cr.
PSYC-313	Social Psychology or	
	PSYC-314 Industrial Psychology	3 cr.
PSYC-316	Physiological Psychology or	
	PSYC-382 Physiological Bases of	
	Mental Disorders	3 cr.
PSYC-327	Psychology of Learning	3 cr.
PSYC-331	Psychological Tests and	
	Measurements	3 cr.
PSYC-335	History of Psychology	3 cr.

Three electives in psychology		9 cr.
Total		31 cr.

* These courses should be completed before the beginning of a student's senior year.

Areas of Emphasis

The Psychology Department offers four areas of emphasis. Students may choose to take all required electives (i.e., 18 credit hours) in one area. Such specialization often increases a graduate's job opportunities.

Currently, several courses are offered by the department in each of the following areas:

- gerontology
- neuropsychology
- life span development
- applied psychology

Minor in Psychology (18-19 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 an equivalent 3 credit hour course in general psychology may complete the minor with 18 credit hours.

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.

Required Courses:

PSYC-AGED-221	Introduction to Gerontology	3 cr.
PSYC-AGED-384	Psychotherapy with the Aging	3 cr.
PSYC-AGED-385	Psychosocial Development	
	and Aging	3 cr.
PSYC-AGED-386	Seminar in Aging	3 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 Perspectives	3 cr.
Total	18 cr.

NOTE: The same courses may not be used to fill requirements in two different programs.

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 from 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.

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 subjects. Taught by a team of department members, the topics will vary but will always deal with current issues in the field.

PSYC-103 Theory and Practice of Interviewing, 3 cr. Learn interviewing through practice, role playing and study of theoretical foundations.

PSYC-112 Parenting, 3 cr. A practical course for parents and parents-to-be emphasizing psychological principles for encouraging appropriate and eliminating inappropriate behavior.

PSYC-128 Psychology of Mental Health, 3 cr. Focuses on the 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. This course is a prerequisite for most psychology courses.

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.

PSYC-246 Introduction to Parapsychology, 3 cr. Introduction to the field of parapsychology. Through discussion of the more commonly known phenomena of precognition, telepathy, clairvoyance, and telekinesis. These phenomena are placed in historical perspective; the current research in the area is presented. *Prereq:* PSYC-201.

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.

PSYC-304 Pro-Seminar in Psychology, 3 cr. Special and timely topics in psychology. Discussion, reading, and/or library research. *Prereq:* PSYC-201.

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.

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.

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.

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, work-supervisor relations, and executive behavior. *Prereq:* PSYC-201.

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.

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.

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 plus 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.

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-322 Advanced Experimental Psychology, 3 cr. Application of basic experimental principles to psychological research in selected areas; reaction time and motor learning, verbal learning, perception, problem solving and animal learning (when space is available). *Prereq:* PSYC-318.

PSYC-323 Human Perception, 3 cr. Considers how our perceiving and performing systems convert information from the environment and the self to action in everyday life. *Prereq:* PSYC-201.

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.

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.

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.

PSYC-332 Introduction to Psychotherapy, 3 cr. An 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.

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.

PSYC-337 Humanistic Theories of Personality, 3 cr. Approaches of the third force psychologists to the study of personality development. *Prereq:* PSYC-201.

PSYC-339 Seminar in the Teaching of Introductory Psychology, 3 cr. Considers and evaluates 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 Systems Theory in Behavioral Science I: The Feedback Concept, 3 cr. Feedback theory of human behavior. The concept of environmental control through negative feedback. Reinterpretation of traditional topics in psychology in terms of feedback theory. *Prereq:* PSYC-201.

PSYC-342 Systems Theory in Behavioral Science II: General Systems Theory of Behavioral Phenomena, 3 cr. Further development of concepts of 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, 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 and 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.

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, 1 cr. Special study projects in psychology to be specifically and individually contracted with the instructor. Arrangements should be made in the term prior to registration. **Prereq.:** PSYC-201 and written consent of instructor.

PSYC-358 Independent Study in Psychology, 2cr. (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 to be specifically and individually contracted with the instructor. Arrangements should be made in the term prior to registration. **Prereq.:** PSYC-201 and written consent of instructor.

PSYC-378 Human Growth and Behavior, 3 cr. Relationships between developmental tasks and principles of learning; scientific methods in the study of human development; general principles of development with emphasis on mental and physical growth. **Prereq:** PSYC-201.

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 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 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 Childhood Neuroses, 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-415 Advanced Social Psychology, 3 cr. In-depth examination of the major research in social psychology: laboratory, environmental, and naturalistic. Current major theoretical issues will be examined and related to ongoing research. Problems of application, such as program evaluation and organizational change methods, will be demonstrated and practicum work introduced as circumstances permit. **Prereq.:** graduate standing and PSYC-313 or equivalent.

PSYC-421 Introduction to Clinical Psychology, 3 cr. History of clinical psychology as a science and as a profession; use of diagnostic tools, clinical evaluation, psychotherapy, research in clinical problems and interpretation of clinical reports in the assessment of individuals. **Prereq.:** graduate standing and PSYC-331.

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-437 Theories and Principles of Counseling, 3 cr. Theories and principles of personal and therapeutic counseling; essentials of the counseling process. **Prereq.:** graduate standing.

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, and an 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-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 SCIENCE

Edward C. Uliassi, Ph.D., Professor of Sociology,
Coordinator, Social Science Program
Nancy Spencer, M.A., Professor of Anthropology,
Coordinator of the Education Sequences
in the Social Science Program

The Social Science Program offers undergraduate interdisciplinary programs. The undergraduate program includes 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 following social science disciplines: Anthropology, Economics, Geography and Environmental Studies, History, Political Science, Psychology, Sociology, and Social Science.

Specialized 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 students in the liberal arts major and minor. Those undergraduate and degreed students who seek certification for teaching must contact the Coordinator of the Education Sequences in the Social Science Program for advisement. 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. Students work out specific contracts in consultation with the coordinator of their major or minor program. Contracts must be completed at least one calendar year before expected graduation.

Since individual requirements vary, students must consult with their major or minor advisor before entering a program of study in social science. Students should contact the appropriate advisor as soon as they consider a major or minor in social science.

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 Research Skills: Basic Variant3 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 Research 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 disciplines 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 departments are surveyed.

NOTE: At least 21 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:

Students must select from a list of designated courses offered by the following social science disciplines: Anthropology, Economics, Geography and Environmental Studies, History, Political Science, Psychology, and Sociology:

6 courses in one discipline 18 cr.
6 courses in a second discipline (or 3 courses
in each of two disciplines) 18 cr.
Total 36 cr.

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 check with their advisor in the College of Education as well as the Coordinator of the Education Sequences in the Social Science Program to ensure that they keep abreast of new developments, including possible changes in the number of credits required in a discipline and the particular courses available or required.

NOTE: Students seeking certification to teach U.S. 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. To be certified to teach history, students must have 16 semester hours in history.

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 Research Skills: Basic Variant3 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 Research Skills: Advanced Variant.....3 cr.

Electives 18 cr.
Total 24 cr.

Elective courses are chosen from a list of designated courses offered by the social science disciplines (except the Social Science Program) and need approval of the advisor. 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 departments 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 from a list of designated courses in consultation with the advisor		6 cr.
6 credits of electives, to be chosen from a list of designated courses in the disciplines of Anthropology, Economics, Political Science, Social Science, and Sociology in consultation with the advisor		6 cr.
3 credits of electives to be chosen in consultation with the advisor, from the disciplines of Anthropology Economics, Geography and Environmental Studies, History Political Science, Social Science, and Sociology.....		3 cr.
Total		24 cr.

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

COURSE OFFERINGS

NOTE: SSCI-prefix courses only are listed below. Lists of designated courses in the various social science disciplines are available from the appropriate coordinator.

SSCI-101 Introduction to the Social Sciences, 3 cr. Provides a foundation for further studies in the social sciences. Emphasis is placed on the elements of scientific thinking and their importance for the social sciences.

SSCI-111 Social Science Information Resources and Research Skills: Basic Variant, 3 cr. Introduces students 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 gets an introduction to available social science information resources, and experience in accessing and using these resources.

SSCI-301 Foundations of Scientific Inquiry in the Social Sciences, 3 cr. Examines the foundations of scientific inquiry and their importance for the social sciences. Selected issues surrounding the nature and methodology of the sciences will be 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 Research Skills: Advanced Variant, 3 cr. Students will develop knowledge of social science information systems, resources, and research methodology; will learn how to access and use available information resources through actual practice; and will complete original library research on an interdisciplinary topic in social science. *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. Students will investigate the interdisciplinary nature of selected problems under the guidance of a faculty member from the participating social science departments. The laboratory component of the course will focus on the development of interdisciplinary instructional materials from each of the social sciences. *Prereq.:* completion of 24 credit hours in social sciences.

SSCI-390 Field Experience, 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 will be held 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 consent of instructor.

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 consent of instructor.

SSCI-392 Internship II, 6 cr. (See description for SSCI-390.) *Prereq.:* junior or senior standing and consent of instructor.

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 Studies in the Social Sciences, 3 cr. An individualized course for the formulation, development, and integration of a comprehensive graduate program of advanced interdisciplinary studies in social science under the guidance of a faculty specialist in the field. Emphasis on information resources and strategies for advanced studies, including techniques for the preparation of scholarly research papers and theses. A course designed to be taken immediately after SSCI-414 in the basic sequence for graduate students in social science. Individualized instruction. Registration for this course, which does not appear in published class schedules, requires

completion of the Request for Tutored Study form. *Prereq.:* graduate standing, admission to the Master of Arts Social Science program, and SSCI-414 or signed approval of the program coordinator.

SSCI-427 Research Seminar in General Social Science, 3 cr. Culminating course in the program. Students prepare a research paper dealing with 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. Weekly class sessions feature lecture and discussion. Extensive reading and preparation of an analytical seminar paper is required. May be repeated for credit in sections with different subtitles. *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 of 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.

SOCIAL WORK

Wanda Bracy, M.S.W., Associate Professor
O. Evalyn Vigil de McCoy, M.A., Professor,
Chairperson
Jane E. Peller, M.A., Assistant Professor
John Rouse, M.S.W., Assistant Professor
Carlos A. Torre, Ed.D., Professor

The primary goal of the Department of Social Work is to prepare cross-cultural generalists capable of engaging in beginning problem solving with individuals, families, groups and communities of diverse backgrounds. The degree program is built on a liberal arts base, theory-based training and educationally-directed field experience. Specific objectives are:

1. to prepare knowledgeable beginning-level social work practitioners as cross cultural generalists, who have an understanding of government policy and of themselves in relationship to diverse groups in the urban environment;
2. to develop in students preparing for graduate education sensitivity to the nuances of work with clients in a cross cultural context as well as a firm knowledge base in the profession including research skills;
3. to enrich the liberal arts curriculum for those who are not Social Work majors through exposure to cross-cultural issues in meeting human needs.

The Department of Social Work is currently seeking accreditation from the Council on Social Work Education.

UNDERGRADUATE PROGRAMS

Major in Social Work for the Bachelor of Arts Degree

Required Courses:

BIOL-100	Introduction to Biology.....	3 cr.
ECON-215	Principles of Macroeconomics	3 cr.
PSCI-AMER-101	Introduction to American Politics or	
PSCI-AMER-216	American National Government ...	3 cr.

PSYC-201	General Psychology	4 cr.
SOC-100	Introductory Sociology.....	3 cr.
Select one of the following courses in consultation with a departmental advisor:.....		3 cr.
ANTH-212	Cultural Anthropology	3 cr.
PSYC-311	Psychology of Personality.....	3 cr.
PSYC-312	Abnormal Psychology	3 cr.
SOC-204	Individuals, Groups and Society	3 cr.

Women's Studies		3 cr.
Select one of the following courses in consultation with a departmental advisor:		
WSP-101	Introduction to Women's Studies.....	3 cr.
WSP-350	Seminar in Women's Studies.....	3 cr.
PSCI-AMER-321W	Impact of Public Policy on Women.....	3 cr.

PSCI-THRY-379	Law and Social Change.....	3 cr.
PSYC-315	Psychological Development of Women	3 cr.
SOC-306	American Women: The Changing Image	3 cr.
SOC-376	Sociology of Working Women	3 cr.

One elementary statistics course

(Students planning to attend graduate school should register for a 300-level statistics course.)

SWK-200	Introduction to Social Work.....	3 cr.
SWK-205	Social Service Modalities.....	3 cr.
SWK-206	Human Behavior in the Social Environment....	3 cr.
SWK-303	Analysis of Cross-Cultural Interaction	3 cr.
SWK-310	Research Practicum in Social Work I	2 cr.
SWK-311	Research Practicum in Social Work II	2 cr.
SWK-304	Social Work Methods I	3 cr.
SWK-305	Social Work Methods II	3 cr.
SWK-355	Field Instruction I	6 cr.
SWK-356	Field Instruction II	6 cr.
SWK-357	Social Welfare Policy and Services	3 cr.
Electives		9 cr.
Total		71 cr.

To be eligible for admission to the major, students must have a minimum GPA of 3.5. Application forms are available in the departmental office.

Minor in Social Work (21 cr. hrs.)

Required Courses:

SWK-200	Introduction to Social Work.....	3 cr.
SWK-205	Social Service Modalities.....	3 cr.
SWK-303	Analysis of Cross-Cultural Interaction	3 cr.
SWK-325	Elective Practicum.....	3 cr.
SWK-328	Interpersonal Skills in the Helping Professions	3 cr.
Electives		6 cr.
Total		21 cr.

COURSE OFFERINGS

SWK-200 Introduction to Social Work, 3 cr. This course is designed for students who are considering a career in social work or are interested in finding out about social work. It is required for students who plan to major in social work. The course will provide students with an overview of social work and will focus on the philosophical basis, historical development and future growth of the field. Skills, knowledge base, social work

processes and problems addressed by social work will be identified.

SWK-201 Problem Solving and Decision Making, 3 cr. The main purpose of this course is to enable students to develop an orderly thought process, approach problems critically from an interdisciplinary perspective, and more effectively communicate their findings and proposals.

SWK-205 Social Service Modalities, 3 cr. This course builds on the information acquired in SWK-200. It focuses on understanding the professional practice of social work and the skills required. A working definition of social work will be developed as well as an understanding of purpose, sanction, values, knowledge base and core skills of the profession. *Prereq.: SWK-200.*

SWK-206 Human Behavior in the Social Environment, 3 cr. Focuses on the life stages that human beings experience as psychological, biological, and social cultural entities, and the pertinence these phenomena have for social work practice. The learning process involves the critical conceptual, practical experiential approaches to comprehending the helping processes appropriate to the stages of human growth and development. The stages examined are prenatal period, childhood, adolescence, adulthood, old age, and death. *Prereq.: SWK-205, BIOL-100 and PSYC-201.*

SWK-207 Patterns in Service Delivery, 3 cr. Exposes students to the various types of social service programs and agencies in the Chicago Metropolitan area, permits them to become familiar with the specific programs and services offered by these agencies and allows them to develop some understanding of the characteristics of social welfare organizations.

SWK-301 Community History, 3 cr. Research practicum on local community history. Students will be exposed to methods for gathering, interpreting, and presenting information about a local community. It is expected that the student will use these skills to research a community of his or her choice as an integral part of the course experience. *Prereq: SWK-200.*

SWK-302 The Practice of Community Organization, 3 cr. Familiarizes students with the various approaches to solving problems at the local level. Focuses on community organization practice as it has developed in the field of social work. Special consideration will be given to community development and social action models of community organization practice with some attention to community planning. Students will analyze community organization practice by examining the organization contexts and the activities of community organizers. *Prereq: SWK-205 or consent of instructor.*

SWK-303 Analysis of Cross-Cultural Interaction, 3 cr. Examines the nature and causes of ghettos and their environmental effects on residents; analyzes the particular life styles and world views of a number of ethnic/racial groups, placing emphasis on stereotypes and generalizations, in an effort to see how these factors further affect the plight in oppressed settings. Students will synthesize the acquired data into proposals for strengthening inter-cultural growth and cooperation. The implications of these topics for social work are emphasized. *Prereq.: SWK-205.*

SWK-304 Social Work Methods I, 3 cr. Students are required to develop a more sophisticated understanding of micro-skills and beginning social work processes with individuals, families and small groups. Micro-interventions will be emphasized enabling the student to perform beginning level tasks. The cultural, social and ethnic value of human beings will be emphasized to promote student growth and self awareness. *Prereq: SWK-206 and swk-303; open to social work majors only.*

SWK-305 Social Work Methods II, 3 cr. Students will develop a more sophisticated understanding of macro-skills and beginning social work processes with larger groups, organizations, and communities. The development of basic skills in group leadership advocacy and planning are emphasized. *Prereq.: SWK-304; open to social work majors only.*

SWK-308 The Practice of Social Work Planning and Administration, 3 cr. Conceptualization and execution of administrative and planning tasks. *Prereq: SWK-205.*

SWK-310 Research Practicum in Social Work I, 2 cr. Enables students to make use of research to evaluate and enhance their practice. Students will be exposed to research concepts and methods, and empirical research. Students are required to submit a research proposal describing purpose and design of an investigation into some aspect of their field practice. *Prereq.: SWK-205, a statistics course, and consent of instructor. Taken concurrently with SWK-355.*

SWK-311 Research Practicum in Social Work II, 2 cr. Continuation of SWK-310. Students will collect, tabulate, and analyze data and write a research report. They will learn how to use the personal computer to facilitate this process. *Prereq: SWK-310 taken concurrently with SWK-356.*

SWK-312 History and Culture of Hispanic Americans, 3 cr. An ethnographic survey of Hispanic countries with emphasis on the peoples and cultures of Mexico, Puerto Rico, and Cuba in order to help students understand and appreciate the particular situation and needs of these Hispanic groups living in the U.S. *Prereq: SWK-200.*

SWK-325 Elective Practicum in Social Work, 3 cr. A two hour weekly seminar and a ten hour weekly field placement during a 16 week term. Five areas will be focused on: knowledge of the agency and its role in the community, professional values, interventive skills, self awareness and management of professional relationships. *Prereq: SWK-328, consent of instructor and 12 hours in social work.*

SWK-327 Social Work Practice with Families, 3 cr. Comprehensive overview of the field of family therapy. The course focuses upon the different theoretical assumptions of each type of family therapy and how they apply to making social work family assessments and interventions. *Prereq: SWK-206 or consent of instructor.*

SWK-328 Interactional Skills in the Helping Professions, 3 cr. Designed for social work minors and others interested in acquiring and developing interpersonal and communication problem-solving skills in the human professions. *Prereq: SWK-205 and consent of instructor.*

SWK-350 Issues in Social Service Delivery, 3 cr. For students who have had some experience as human service workers. The course enables students to gain an understanding of some of the problems and issues they are likely to face as human service workers. Students will gain insight into the reasons why certain problems and issues exist and begin to develop their approach to problems and issues. *Prereq.: SWK-205.*

SWK-355 Field Instruction I, 6 cr. A beginning field experience in the laboratory of the community. Opportunities for development, testing, and reinforcement of theoretical knowledge, values, and competencies are provided through performance in actual service situations and in a seminar. Students are placed in agencies and community organizations which serve client populations preferably different from the student's own background. Students are at their field site for about 16 hours a week and attend a two and one-half hour weekly seminar on campus. *Prereq.: SWK-305, three additional hours in social work, and consent of instructor. Taken concurrently with SWK-310. Open to social work majors only.*

SWK-356 Field Instruction II, 6 cr. Continuation of SWK-355. Practice in a field site which serves a client population preferably different from the student's own background. Students are at their field site for 224 hours during the trimester. The course will focus on the macro-systems, and both classroom and field experiences will be geared toward developing beginning level practitioner skills in group work, community development, planning and administration. Particular attention will be given to developing sensitivity to the nuances of practice with diverse client populations. *Prereq: SWK-355 and consent of instructor. Taken concurrently with SWK-311. Open to social work majors only.*

SWK-357 Social Welfare Policy and Services, 3 cr. Enables students to develop a framework for analyzing social welfare policy and an understanding of how it influences service delivery. *Prereq.: SWK-205, ECON-215, SOC-100 and PSCI-AMER-101.*

SWK-358 Techniques of Societal Intervention, 3 cr. Skills of political intervention, situation assessment and communication on issues relevant to the social work field. The course will focus on formal and informal policy making processes of government, dealings with legislators, policy makers and political bureaucracies as well as development of skills useful in bill analysis, writing of position papers, political interviews and testimony. *Prereq: SWK-205.*

SWK-360 Topics in Social Work, 3 cr. Topics will range from intensive training workshops to current issues in the field of social work. Consult the schedule of classes for particular topics. *Prereq: SWK-205 or appropriate background as determined by the instructor.*

SOCIOLOGY

Samuel Betances, Ed.D., Professor
Iva Carruthers, Ph.D., Professor
Ronald Glick, D.Crim., Professor
Alva Maxey, Ph.D., Associate Professor
Vera Milam, M.A., Associate Professor, Chairperson
Mary Ann Schwartz, Ph.D., Professor
BarBara Scott, M.A., Visiting Lecturer
Daniel Stern, Ph.D., Professor
Martha Thompson, Ph.D., Associate Professor
Edward Uliassi, Ph.D., Professor

The Department of Sociology offers courses leading to the degree of Bachelor of Arts.

Sociology is the study of human societies — their patterns and arrangements, their processes of development and change.

Departmental course offerings are designed to provide a scientific approach to the significant factors and processes of modern life with special emphasis on issues of race, class, and sex. The program provides a core curriculum in research and theory and related courses in women's studies, urban problems, social organization and social change. Students may also participate in independent study and community field experiences.

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	Introductory 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 (18 cr. hrs.)

Required Courses:

SOC-100	Introductory 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 Introductory Sociology, 3 cr. Examines fundamental concepts involved in the functioning of human society. Socialization, culture, and principles of institutions and group behavior will be discussed as will the role of sex, race, and class.

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. An emphasis is placed 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 varying drug treatment approaches and proposals. *Prereq.: consent of instructor.*

SOC-207 Urban Ecology, 3 cr. Urban characteristics, emphasizing the Chicago metropolitan area; analysis of geographical, ecological and sociological processes that affect patterns of city structure and function; consideration of current urban issues, such as housing, civil rights, and anti-poverty programs; field work. *Prereq.: SOC-100 or consent of instructor.*

SOC-208 Social Impact of U.S. Colonialism in Puerto Rico, 3 cr. Analysis of the social impact of the English language and other Americanizing influences on the culture and institutions of Puerto Rico, particularly the educational and economic systems; focuses on the rise of the Popular Democratic Party, the politics of Luis Munoz Marin; examines organized political movements in Puerto Rico. *Prereq.: consent of instructor.*

SOC-209 Social Change, 3 cr. Introductory course that provides an interdisciplinary and cross-cultural view of selected political, economic and social change in contemporary society; emphasis is placed upon the institutional contexts of recent social change.

SOC-210 Revolution and Conflict, 3 cr. An analysis of selected major revolutions and/or revolutionary movements in developing and industrialized nations. *Prereq.: consent of instructor.*

SOC-214 Sociology of Marriage and the Family, 3 cr. Focuses on the major issues involved in the current criticism of family systems with a view to predicting how present traditional forms are likely to mesh with changing trends to form courtship, marriage, and family patterns in the future. Areas of study include the historical role of the family (including development of sex roles), family types, sexuality, marital interaction, divorce, and single parenthood. *Prereq.:* consent of instructor.

SOC-216 Contemporary American Institutions, 3 cr. An extensive examination of selected contemporary American institutions and their interrelationships. Major emphasis is placed on the U.S. ruling class, the multinational banks and corporations, imperialism, and militarism.

SOC-219 Social Organization, 3 cr. Organization and structure of modern complex societies, stratification systems. *Prereq.:* SOC-100.

SOC-221 Sociology of Work, 3 cr. An examination of the changing nature of work in U.S. society as well as other societies. Areas of study include the impact of technology on the way we work and the kinds of work we do, changing sex roles in the workplace, patterns of discrimination, unemployment, and work roles in the future.

SOC-302 Sociology of Aging, 3 cr. An examination of the aging process from a variety of sociological perspectives. The nature and quality of relationships which exist among members of different generations, both within and outside the context of family life will also be discussed. Special emphasis will be placed on the contributions and problems associated with growing old in American society. *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. Course is designed to serve as an introduction to other courses in women's studies. As such, data will be drawn from several disciplines. *Prereq.:* consent of instructor.

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. *Prereq.:* consent of instructor.

SOC-309 Sociology of Racism, 3 cr. 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. The Black experience in America will be highlighted and special attention will be given to the institutional expressions of racism in the Western World. *Prereq.:* consent of instructor.

SOC-310 The Mexican-American Experience, 3 cr. This course will have as its emphasis an examination of those social, historical and economic factors which have had a major impact upon the culture, institutions and socioeconomic status of Mexican-Americans. The conditions which have led to the increased political awareness of Mexican-Americans will also be discussed. *Prereq.:* SOC-100 or consent of instructor.

SOC-312 Sociology of Health Care, 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. *Prereq.:* consent of instructor.

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 problems associated with urbanization and community development. Historical and cross-cultural studies of urban communities. *Prereq.:* SOC-100.

SOC-315 Puerto Ricans in U.S. Society, 3 cr. Examines the significance and consequence of the Puerto Rican experience in the U.S. Topics include: migration patterns, family and kinship, education, religion, inter-ethnic tensions, the sociological and psychological implications of being Puerto Rican in the U.S., and Puerto Ricans as part of the larger Latino communities in the U.S. *Prereq.:* SOC-208 or consent of instructor.

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. The 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, considering 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-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. *Prereq.:* SOC-100 or SOC-306 or consent of instructor.

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. Particular emphasis upon the covert functions and operations of selected political institutions, as contrasted with those conventionally portrayed in traditional information sources including those of political science and sociology. *Prereq.:* junior or senior standing, or consent of instructor.

SOC-326 Sociology of Knowledge, 3 cr. Cultural and sub-cultural frames of reference as the basis for socially-accepted knowledge or reality constructions. Knowledge as ideology, i.e., as networks of systematically-interrelated ideas generated by distinctive cultural experiences and serving particular interests. Reinterpretation of selected bodies of social science (and sociological) knowledge as culture-bound ideology. Consideration of humanistic and scientific alternatives to knowledge as ideology. *Prereq.:* consent of instructor.

SOC-329 Sociology of Violence, 3 cr. Cross cultural study and focus on social and psychological explanations of violence in American society. *Prereq.:* SOC-100.

SOC-330 Upper Strata Crime in America, 3 cr. Examination of patterns in white collar crime, corporate infractions and government crime. *Prereq.:* SOC-100.

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. *Prereq.:* consent of instructor.

SOC-333 Work and Society, 3 cr. Relations of work patterns to total societies; interaction and relationships within the work situation; the tensions and conflicts of the occupational and professional roles; socialization into occupational and professional roles.

SOC-334 Collective Behavior, 3 cr. Behavior in relatively unstructured situations; the analysis of behavior in crowds, mobs and disaster situations; the study of social movements, cults, fads, etc.

SOC-335 Sociological Theory, 3 cr. History of social thought, the various interpretations of societal patterns; the theoretical orientations of the fathers of sociology, the logic of theory construction and its relations to methods of studying societies. *Prereq.:* SOC-100.

SOC-337 Methods of Sociological Inquiry, 3 cr. Research design, construction of questionnaires and schedules, interviewing techniques, statistical interpretation and computer processing of data; study of the relation of research method to theoretical orientation. Students to participate in original research on either individual or group basis. *Prereq.:* SOC-100.

SOC-338 Sociology and Social Policy, 3 cr. Past, present, and prospective uses of social research in local, national and international programs; new developments in sociological research, such as the use of social indicators to develop agenda for political action, and their policy implications; case studies of the relationships of sociology and social policy, involving both domestic and foreign-area research. *Prereq.:* SOC-100.

SOC-340 Sociology of Sexuality, 3 cr. Discussion and reading of a critical nature to examine 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. *Prereq.:* consent of instructor.

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-342 Introduction to Social Welfare, 3 cr. Examination of the social welfare profession, functioning within a framework of social institutions, social organizations, social policies, and social standards which give identity and form to professional social work services. *Prereq.:* consent of instructor.

SOC-345 Social Movements, 3 cr. The nature of social movements; the generation, maintenance and decline of commitment to social movements. An analysis of the relationship of social movements to social change. *Prereq.:* SOC-100.

SOC-346 Social Stratification, 3 cr. Consideration of the role of social differentiation and stratification in the formation and maintenance of social organization; an examination of the nature and consequences of various stratification systems. *Prereq.:* SOC-100 or consent of instructor.

SOC-347 Sociology of Communications, 3 cr. The study of communication between individuals, between groups and the characteristic patterns of communication in societies. The nature of rumor, conversation and the popular arts with reference to mass media. The functions and effects of mass media and the social context in which they function.

SOC-351 Senior Seminar in Sociology, 3 cr. Discussion, critical review and integration of the student's work with current research. *Prereq.:* senior standing, SOC-335 and SOC-337 or consent of instructor.

SOC-355 Advanced Sociological Theory, 3 cr. An analysis and evaluation of the major theories in sociology that are significant today. Among the theories that will be considered are functionalism, game theory, exchange theory, modern symbolic interactionism and the "the new sociology." *Prereq.:* SOC-335.

SOC-356 Advanced Field Methods in Sociology, 3 cr. A presentation of the various sociological methods used in field studies. An emphasis is placed upon participant-observation, the life history, the case method and focused interviews. Students will acquire familiarity with various techniques through supervised field research. Prior completion of a course in statistics will be of advantage to the student. *Prereq.:* SOC-337.

SOC-357 Pro-Seminar in Sociology, 3 cr. Exploration at 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 relevant information. *Prereq.:* SOC-100 or consent of instructor.

SOC-373 Community Field Studies I, 3 cr. Chicago metropolitan field investigation of community conditions, local institutions and action programs, field investigations may be broad — action programs for housing integration — or specific, such as intensive study of a particular school-community. Findings viewed in the perspective of national and local community action program. *Prereq.:* SOC-337.

SOC-374 Community Field Studies II, 3 cr. In-depth field investigations utilizing participant-observer techniques in community agencies. *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. The kinds of intelligence gathered and the political uses to which it is put will be among the major emphasis of the course. The work of the CIA and the FBI will be 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. *Prereq.:* SOC-306 or consent of instructor.

SOC-403 Independent Study in Sociology, 3 cr. Under the direction of an instructor, a student will prepare a resource bibliography, read relevant sources, and discuss 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. *Prereq.:* admission to Master of Arts Social Science Program.

SPEECH AND PERFORMING ARTS

James W. Barushok, Ph.D., Professor
Bernard J. Brommel, Ph.D., Professor
Richard Hesler, M.A., Professor
Harold Hild, Ph.D., Associate Professor
Robert O. Hirsch, Ph.D., Assistant Professor
David G. Jordan, Ph.D., Associate Professor
Libby A. Mages, M.A., Assistant Professor

Durward A. Redd, M.A., Professor
William R. Stewart, M.A., Assistant Professor
David F. Unumb, M.A., 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 Laboratory 1 cr.
SPCH-COMM-206 Individual Events Laboratory..... 1 cr.
SPCH-MASS-208 Media Laboratory..... 1 cr.
SPCH-PERF-139 Theatre Practicum 1 cr.
SPCH-PERF-207 Interpreters Laboratory..... 1 cr.

Two courses selected from the following:..... 6 cr.

SPCH-COMM-201 Introduction to Semantics 3 cr.
SPCH-COMM-215 Group Discussion..... 3 cr.
SPCH-MASS-260 Introduction to Radio,
Television, and Film 3 cr.

SPCH-PATH-270 Introduction to the Field of
Communicative Disorders 3 cr.

SPCH-PERF-130 Introduction to Theatre 3 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 insure completion of 18 credit hours in speech selected from the following four areas: public speaking, interpersonal communication, oral interpretation, and group discussion. In addition, they are required to take 6 credit hours in rhetoric and composition. 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 Diction..... 3 cr.
SPCH-COMM-210 Public Speaking 3 cr.
SPCH-COMM-215 Group Discussion 3 cr.
SPCH-PERF-255 Oral Interpretation
of Literature 3 cr.

Electives: 12 cr.

6 of which must be at the 300 level,
selected in consultation with an advisor

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 Semantics 3 cr.
SPCH-COMM-215 Group Discussion 3 cr.

SPCH-MASS-260 Introduction to Radio,
Television and Film 3 cr.

SPCH-PATH-270 Introduction to the Field of
Communicative Disorders 3 cr.

SPCH-PERF-130 Introduction to Theatre 3 cr.
SPCH-PERF-255 Oral Interpretation of
Literature 3 cr.

Electives in speech or performing arts 6 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 arts 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:

A program of course work totaling 30 credit hours will be 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 Speech..... 3 cr.

SPCH-COMM-404 Communication Theory..... 3 cr.

SPCH-PERF-430 Dramatic Theory..... 3 cr.

Electives selected from 400-level courses in
speech and performing arts..... 9 cr.

Electives selected from courses in speech and
performing arts at either the 400 or
300-level..... 12 cr.

Total 30 cr.

Students may elect a thesis or a 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. SPCH-499, Thesis Seminar in Speech, should be taken while students write their thesis. The course counts as two of the required five 400-level courses. No more than six credit hours of the required total of 30 may be received for work on the thesis.

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 student's conducting research and writing a thesis to fulfill requirements for the master's degree in the field of Speech and the Performing Arts. **Prereq.:** acceptance to master's degree candidacy in speech and approval of graduate advisor.

Communications

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. A study of the structure of argument, fallacies of reasoning, and evidence. Practice in argumentation in interpersonal, small group, and public settings. **Prereq.:** SPCH-COMM-101 or SPCH-COMM-215.

SPCH-COMM-213 Interpersonal Communication, 3 cr. A 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. **Prereq.:** consent of instructor.

SPCH-COMM-308 Independent Study in Speech, 3 cr. Individual investigation into a topic of the student's choice under the guidance of a staff member who specializes in the topic. **Prereq.:** consent of instructor.

SPCH-COMM-310 Persuasion, 3 cr. Contemporary theories and practices of persuasion; practice in making 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. The purpose of this course is to investigate the effects of sex and sex role on communication behaviors. Topics include: 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. A study of the family as a system with an examination of the role communication plays. Topics include the function of family roles, rules and power are how they operate to increase or decrease communication effectiveness in this system.

SPCH-COMM-318 Communication Consulting, 3 cr. Examination of requirements, procedures, and communication topic areas and levels of expertise needed for communication consulting with businesses, professional associations and governmental agencies. *Prereq:* SPCH-COMM-214.

SPCH-COMM-320 Classical Rhetoric, 3 cr. Rhetorical theories from Greece and Rome emphasizing Plato, Aristotle, Cicero, and Quintilian. *Prereq:* junior standing or consent of instructor.

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. A study of major intellectual and moral trends in British public and parliamentary debate from the mid-nineteenth century to the present day. Concentration on imperialism, parliamentary reform, economic and social change, and religious and political liberty.

SPCH-COMM-324 Rebels and Reformers in American Thought, 3 cr. A study of the speakers who through public communication had an impact on the course of American history from the colonial period to the present. Students will examine speakers such as Jonathan Edwards, Patrick Henry, Wendell Phillips, Robert Ingersoll, Angelina Grimke, William Lloyd Garrison, Carry Nation, Eugene V. Debs, Harry Truman, and Martin Luther King.

SPCH-COMM-401 Introduction to Graduate Study in Speech, 3 cr. Problems, methods and resources involved in graduate study and 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-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. 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. The course deals with 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 school and classroom, such as the inner city. *Prereq:* graduate standing.

SPCH-ED-492 The Teaching of College Speech, 3 cr. A study of the tasks of the college speech teacher; philosophy, objectives, materials and methods of instruction, speech curricula and departmental operations; and professional interrelationships in the community. *Prereq:* graduate standing and six credit hours in speech.

Mass Media

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 Introduction to Radio, Television and Film, 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-261 Introduction to Film Making, 3 cr. A detailed study of how films are made: shooting angle, camera position, framing, optical effects, dialogue, music, sound, film time, montage, editing, realistic and surreal film styles, etc.

SPCH-MASS-265 Mass Media I, 3 cr. Development and problems of the mass media; the history, regulation, 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, 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-362 Film As An Art Form, 3 cr. Film as an art form of intellectual significance; analysis of film classics in terms of substance, form, techniques, and media.

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 Mass Media II, 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. The course will include 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 mechanisms 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 which underlie 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 preparation of 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. A 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 Stagecraft, 3 cr. Principles of theatre arts applied to lighting, scenery, costumes, properties, make-up, and business, with emphasis on production values. Students will assist in theatre production and attend public performances.

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 external technique for projecting the role to his 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 will also be 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; staff guidance. *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. A 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. A 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. A 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-240.

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. A study of the art of drama 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. A 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 wherein all phases of musical theatre production are studied 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 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. The development of leadership in conducting creative dramatics programs to serve the needs of children from grades one through twelve.

SPCH-PERF-423 Independent Study in Performing Arts, 3 cr. Selected topics in methods and materials for dramatic activities. **Prereq.:** graduate standing and consent of instructor.

SPCH-PERF-430 Dramatic Theory, 3 cr. An 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-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.

COLLEGE OF BUSINESS AND MANAGEMENT

Olga E. Engelhardt, Ph.D., Professor of Management, Dean
William H. Macey, 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 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 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 ACTG-201, ACTG-202, BLAW-280, BLAW-281, or BLAW-285.
2. a minimum of 60 hours completed to take all other Business and Management courses including FINA-360, MNGT-370 and MKTG-350.

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 may 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.

Non-business majors, who do not have an assigned advisor, can have the following courses approved for registration by a counselor in the Counseling Office:

ACTG-201, 202, 310, 311
BLAW-280, 281, 285, 382, 383
FINA-360, 362
MKTG-350, 351, 352
MNGT-370, 371, 372

In order to register for any other Business and Management courses students need the approval of the Business and Management Program Advisors, Administrative Assistant or appropriate Chairperson.

DECLARATION OF MAJORS FOR THE PROGRAMS IN BUSINESS AND MANAGEMENT

1. It is necessary to seek approval from the Program Advisor in order to complete the major declaration form. This advising should take place in the sophomore year.
2. Students declaring any College of Business and Management major must meet the following requirements:
 - a. forty five credit hours completed with a minimum 3.5 grade point average;
 - b. a grade of "B" or better in ENGL-101 or ENGL-102, or a passing score on the English Language Competence Examination;
 - c. a grade of "B" or better in Finite MATH-110 or Pre-calculus MATH-106, or a grade of "C" in combination with passing the Finite Math Competency Examination;
 - d. a grade of "B" or better in ECON-305 Business and Economic Statistics or a grade of "C" in combination with passing the Statistics Competency Examination. If MATH-273 Statistics with Applications is taken, the student must pass a corresponding Statistics Competency Examination to validate that course for application to the major regardless of the grade earned.
 - e. a grade of "C" or better in Accounting I (ABF-ACTG-201).
3. When declaring a major in the College of Business and Management, the student must bring grade reports and/or transcripts to the Program Advisor showing completion of the above requirements.

Students who are declared majors in the College of Business and Management (or who will be officially declared before **January 1, 1987**) are 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. All currently enrolled undeclared students must see the Program Advisors for direction.

DECLARATION OF MINORS IN BUSINESS AND MANAGEMENT

1. Students must consult the Program Advisor and complete a declaration of minor form.
2. All Business minors may be declared in the Sophomore year.
3. 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 Language Competence Examination;
 - c. a grade of "B" or better in Finite MATH-110 or Pre-calculus MATH-106, or a grade of "C" in combination with passing the Finite Math Competency Examination.

SUMMARY OF BUSINESS AND MANAGEMENT POLICIES

Statistics Requirement:

All Business and Management majors must complete ECON-305 Business and Economic Statistics with a grade of "B" or better to meet the statistics core requirement for their major. 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. If MATH-273 Statistics with Applications is taken, students must take and pass a corresponding Statistics Competency Examination (regardless of grade earned) to validate that course.

Students who earn a "B" or better in a Junior level statistics course offered at another four-year college which is equivalent to ECON-305 at Northeastern, will have met the core requirement in statistics and need not take the Competency Examination. However, the examination must be passed if the course grade was "C".

Transfer students majoring in Business and Management must take ECON-305 or MATH-273 at Northeastern if the prior statistics course taken at another institution does not transfer as equivalent. However, all students who have taken statistics in a two-year college must take the Competency Examination.

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.

Introduction to Marketing, Management and Finance taken at a junior college may be accepted as general elective credits. The first course in Finance, Management or Marketing may be accepted for credit toward a major if a student is successful in passing a **validation test**. All other Finance, Management and Marketing courses taken at a community college may only be transferred as general elective credits.

DEPARTMENTS/PROGRAMS

ACCOUNTING, BUSINESS LAW AND FINANCE

Chong-Tong Chen, Ph.D., C.P.A., Associate Professor
of Accounting, Chairperson
Kenneth Finkle, J.D., C.P.A., Associate Professor
of Business Law

NORTHEASTERN ILLINOIS UNIVERSITY

Accounting I and II and Business Law I and II or Legal Environment of Business from a community college, if equivalent, are counted toward the core program. Cost Accounting and Intermediate Accounting I and II or other upper division Accounting courses from a community college may also be counted toward the major in Accounting upon successful completion of the **validation test**. These articulation procedures are effective September 1, 1984.

"D" Grades:

Courses with "D" 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/MNGT-350	Management Information Systems	3 cr.
ABF-FINA-360	Introduction to Finance	3 cr.
MKTG-350	Introduction to Marketing	3 cr.
MNGT-370	Introduction to Management	3 cr.
MNGT-377	Production Management	3 cr.
MNGT-379	Introduction to Operations Research and Management Science	3 cr.
ECON-215	Principles of Macroeconomics	3 cr.
ECON-217	Principles of Microeconomics	3 cr.
ECON-305	Business and Economic Statistics (or MATH-273 Statistics with Applications)*	3 cr.

Total 36 cr.

* A 200-level statistics course must be validated by taking a competency examination.

Donald Geren, M.B.A., C.P.A., Associate Professor
of Accounting
Ruth Goran, M.S.A., C.P.A., Assistant Professor
of Accounting
Charas Kinkle, J.D., M.S.A., Assistant Professor
of Business Law and Accounting

Thomas Krissek, M.B.A., C.P.A., Assistant Professor of Accounting
 Othelia Pryor, M.B.A., Assistant Professor of Finance
 Venkat Raman, Ph.D., C.P.A., Associate Professor of Accounting
 Alfred Robinson, Ph.D., C.P.A., Associate Professor of Accounting
 Bipin J. Shah, M.S., Associate Professor of Finance
 Ahmad Sohrabian, Ph.D., Assistant Professor of Finance
 Harvey Weiss, M.S., M.B.A., Assistant Professor of Finance
 Victoria Zimelis, M.S.A., C.P.A., Assistant Professor of Accounting

National Option Trading Champions.

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-323 Intermediate Financial Accounting III.....	3 cr.
*ABF-ACTG-324 Advanced Financial Accounting IV	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-371 International Financial Management.....	3 cr.
MNGT-393 Business Policy.....	3 cr.
Six courses from the following:.....	18 cr.
ABF-ACTG-310 Federal Income Taxes (Individual)	3 cr.
ABF-ACTG-311 Federal Income Taxes (Corporate).....	3 cr.
ABF-FINA-361 Security Analysis	3 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-367 Short-term Financial Management	3 cr.
ABF-FINA-369 Speculative Markets.....	3 cr.
ABF-FINA-372 Portfolio Management	3 cr.
ABF-FINA-373 Intermediate Financial Management.....	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-BLAW-383 Business Law IV	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 Introduction to Finance.....	3 cr.
ABF-FINA-361 Security Analysis	3 cr.
ABF-FINA-362 Investment.....	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-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-371 International Financial Management.....	3 cr.
ABF-FINA-372 Portfolio Management	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:** INSC-100 or 101; 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.

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-309 Contemporary Financial Accounting Issues, 3 cr. In order to make the student aware that accounting is a growing discipline, current issues are studied. Included are studies of A.I.C.P.A. statements and opinions and F.A.S.B. statements and interpretations. In addition articles from the *Journal of Accountancy* and the *Wall Street Journal* will be analyzed. **Prereq:** ABF-ACTG-324 and senior status.

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-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-323 Intermediate Financial Accounting III, 3 cr. This is the third course in the professional financial accounting sequence. This course emphasizes special topics, such as inflation, pension, foreign currency and multi-national segments. **Prereq:** ABF-ACTG-322.

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-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.

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-383 Business Law IV, 3 cr. The law of debt-or-creditor relations; regulation of the conduct of business; product liability, unfair competition; securities regulation; consumer protection; laws of real estate; disposition of wealth; insurance; trusts; probate administration. **Prereq:** ABF-BLAW-280.

Finance

ABF-FINA-360 Introduction to 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, ABF-ACTG-202 and ECON-305.

ABF-FINA-361 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 or ABF-FINA-362.

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 or ABF-ACTG-202.

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-360 or 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-362.

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-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.

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., Assistant Professor
Hamid Akbari, M.B.A., Assistant Professor
Bruce Fischer, M.B.A., Assistant Professor
Eliezer Geisler, Ph.D., Professor
Lisa K.Gundry, M.Ed., Assistant Professor
H. Durward Hofer, Ph.D., Associate Professor
William H. Macey, Ph.D., Associate Professor
Sheldon Rothstein, M.A., Assistant Professor
Allen N. Shub, Ph.D., Associate Professor, Chairperson

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:.....	12 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 Introduction to Management.....	3 cr.
MNGT-371 Organizational Behavior.....	3 cr.
MNGT-372 Organization Theory.....	3 cr.
MNGT-373 Personnel Administration.....	3 cr.
MNGT-392 Business, Technology and Society.....	3 cr.

One of the following:..... 3 cr.

MNGT-375 Management and Organization Communication.....	3 cr.
MNGT-394 Organization Development.....	3 cr.

One additional management elective..... 3 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 College of Arts and Sciences.

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-I/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-I/IS-310 Business in Pacific Basin Market Area.....	3 cr.

Total 21 cr.

COURSE OFFERINGS

MNGT-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:** INSC-100 or 101, and 60 hours completed.

MNGT-370 Introduction to 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, MKTG-350, ABF-FINA-360 and ABF-ACTG-202.

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 probabilistic control models. In the quality control design the following are covered: quality concept, statistical quality control methods such as control charts, sampling, etc. **Prereq:** MNGT-370 and ECON-305.

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. **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 and ECON-305.

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. **Prereq:** MNGT-370.

MNGT-381 International Management, 3 cr. This course examines the issues that face the international manager. Environmental conditions effecting 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 modelling 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 staff who wish to initiate 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-371.

MARKETING

Patricia Armstrong, M.B.A., Assistant Professor
Judy Cohen, Ph.D., Associate Professor
Sheng Liang Deng, M.B.A., Assistant Professor
Stanley Renas, D.B.A., C.P.M., Professor
Richard Wozniak, M.S., 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.
MNGT-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-I/IS-310 Business in Pacific Basin 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 Introduction to 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 Introduction to 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-351 (or concurrent enrollment in MKTG-351).

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 ECON-305 or MATH-273.

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 general 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.

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 and MNGT-370.

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 and MNGT-370 or consent of instructor.

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.

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.:** MNGT-370, MKTG-350 and one other marketing course.

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-352.

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.

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.

MKTG-382 Internship in Marketing, 3-6 cr. **Prereq:** consent of instructor.

MKTG-389 Independent Study in Marketing, 1-3 cr. **Prereq:** consent of instructor.

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 and Supervision
Educational Foundations
Elementary Education
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. These certification programs are:

Educational Administration

(Graduate level only)

Chief School Business Official
General Administrative

Elementary (K-9)

Secondary (6-12)

Art
Biology
Chemistry
Earth Science
English Education
Foreign Languages: Spanish and/or French
Geography
History
Mathematics
Music
Physics
Physical Education

Social Science
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
Health, Physical Education, Recreation, and Athletics
Physical Education (for Elementary School Teachers)
Physical Education
Leisure Studies
Human Resource Development
Inner City Studies
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
Driver Education
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 Physiology
and Cardiac Rehabilitation

Master of Arts in Educational Administration
and Supervision*

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 teacher education programs, admission to the College of Education is a prerequisite to entering student teaching. The deadline for admission is the last week in June for those student teaching in the Fall and the last week in October for those student teaching in the Winter trimester.

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 3.50 or higher at the time of application. A 3.50 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) or the minor department or program (Art, English, Foreign Languages, Linguistics, Mathematics, Music, Natural Science, Social Science, or Speech). Bilingual-Bicultural majors need only a recommendation from the Elementary Education Program. Early Childhood Education majors who also major in Elementary Education need only a recommendation from the Early Childhood Education Program.

An individual interview may be requested from applicants for admission to the College of Education.

Students may be requested 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 3.50 to remain in good standing. If the cumulative grade point average drops below 3.50 the student will be placed on academic probation in the College of Education. Students are allowed one trimester, while on probation, to raise their cumulative grade point average to 3.50. If the cumulative grade point average is not raised to 3.50 after one trimester 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 3.50. 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 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.

THE CHICAGO TEACHERS' CENTER

Jerry B. Olson, Ph.D., Professor, Director
Christine Wedam, M.S.Ed., Center Coordinator
Noreen Moran, M.Ed., Outreach 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:

- a. Processing of clinical experience placements takes place in the Office of Clinical Experiences and Student Teaching, Room 4-023, Classroom Building.
- b. The lists of approved schools and deadline dates for applying are posted on the bulletin board by Room 4-041. Students make selections from these lists.
- c. All placements are made on a first-come, first-served basis.
- d. To expedite placement, students should apply in the trimester which precedes enrollment in courses requiring clinical experiences.
- e. All students seeking certification must complete the following two courses which each require 10 hours of clinical experience:

EDFN-306 Education and Individual Differences
EDFN-307 Psychology of Instruction and Learning

For information on other clinical experiences required in individual programs, students should consult with their department.

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:

Classification	Student Teaching Assignment	Deadline for College Admission
Undergraduate Students	Fall	Friday of the last week in June
Degreed Students	Fall	Friday of the last week in July
Undergraduate Students	Winter	Friday of the last week in October
Degreed Students	Winter	Friday of the last week in October

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

- 1. Undergraduate students must have completed at least 90 hours of credit.

- 2. 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 behavior (in major or professional courses or in clinical experiences) 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

- 1. A grade point average of 3.50 or higher must be maintained for eligibility to student teach.
- 2. 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. This office conducts an orientation meeting in October for students planning to student teach during the next Fall Trimester and in February for students planning to student teach during the next Winter Trimester. 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
Undergraduate Students	Fall	Friday of the last week in January
Degreed Students	Fall	Friday of the 2nd week in May
Undergraduate Students	Winter	Friday of the last week in March
Degreed Students	Winter	Friday of the last week in September

Students in the certification programs in both elementary and special education must observe the above deadlines when they student teach in the elementary program. In addition, they are required to practice teach for the Department of Special Education which offers practice teaching in the Fall, Winter, and Spring. Deadlines for filing applications to practice teach are:

Fall	Last Friday in February
Winter	Last Friday in June
Spring	Last Friday in November

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, Chairperson

(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 the specialized knowledge, attitudes, and pedagogical skills needed for successful teaching in bilingual/bicultural (Spanish/English) classrooms. Required course work emphasizes social, cultural, psychological, and linguistic aspects of Hispanic people.

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 Education	3 cr.
C&I-BLBC-339	Methods of Teaching Spanish Language Arts in the Elementary School.....	3 cr.

Choose two of the following:	6 cr.
FL-SPAN-331 Hispanic World Cultures.....	3 cr.
FL-SPAN-364 Spanish-Americans of Chicago.....	3 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 Caribbean.....	3 cr.
ANTH-233 Racial and Cultural Minorities	3 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 educational 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.

COUNSELOR EDUCATION

Mary Bowers, Ph.D., Professor
Edward Brogly, Ph.D., Professor
James Fruehling, Ph.D., Professor, Chairperson
Nan Giblin, Ph.D., Assistant Professor
Jane Hawley, Ph.D., Professor
Noah Inbody, Ed.D., Professor
Linda Keel, Ph.D., Assistant Professor
Alice Murata, Ph.D., Professor
Francis Vogel, Ph.D., Professor
William Walsh, Ph.D., Professor

The primary objective of the Department of Counselor Education is to prepare specialists in guidance and counseling at the graduate level. 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. A minimum of 36 credit hours of prescribed course work including six credit hours of practicum.
- 3. Successful completion of a comprehensive 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-313	Principles and Techniques of Guidance	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 and Personnel Work	3 cr.
	Subtotal	15 cr.

*See Department of Special Education
**See Department of Psychology

Required Advanced Courses: (Candidacy a prerequisite)

COUN-456	Community Resources and the Schools	3 cr.
COUN-461	Research Seminar in Guidance and Counseling	3 cr.
COUN-462	Practicum I: Guidance and Counseling	3 cr.
COUN-463	Practicum II: Guidance and 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-313	Principles and Techniques of Guidance	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 and Personnel Work	3 cr.
	Subtotal	15 cr.

Required Advanced Courses:(Candidacy a prerequisite)

COUN-457	Information and Resources for Secondary School Guidance	3 cr.
COUN-461	Research Seminar in Guidance and Counseling	3 cr.
COUN-462	Practicum I: Guidance and Counseling	3 cr.
COUN-463	Practicum II: Guidance and 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 specialists 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-313	Principles and Techniques of Guidance	3 cr.
COUN-421	Evaluation Techniques for Counselors	3 cr.
**PSYC-311	Psychology of Personality.....	3 cr.
COUN-464	Frameworks for Counseling and Personnel Work	3 cr.
COUN-465	Techniques for Counseling and Personnel Work	3 cr.
	Subtotal	15 cr.

Required Advanced Courses:(Candidacy a prerequisite)

COUN-467	Vocational Theory and Occupational
----------	------------------------------------

Information	3 cr.
COUN-461 Research Seminar in Guidance and Counseling	3 cr.
COUN-471 Practicum I	3 cr.
COUN-472 Practicum II	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 specialists 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-313 Principles and Techniques of Guidance	3 cr.
COUN-421 Evaluation Techniques for Counselors	3 cr.
COUN-464 Framework for Counseling and Personnel Work	3 cr.
COUN-465 Techniques for Counseling and Personnel Work	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 in Guidance and Counseling	3 cr.
COUN-471 Practicum I	3 cr.
COUN-472 Practicum II	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 Procedures in Counseling and Personnel Work	3 cr.

COUN-458 The School Guidance Program	3 cr.
COUN-465 Techniques for Counseling and Personnel Work	3 cr.
COUN-468 Seminar in Guidance and Personnel Work	3 cr.

A-Advanced Group Leadership
B-Advanced Counseling
C-Advanced Evaluation Techniques
F-Case Study Techniques
G-Advanced Research
H-Student Personnel Work in Higher Education
J-Alcoholism Counseling
K-Counseling the Gifted
L-Alcoholism Counseling II
M-Counseling Approaches to Stress Management
N-Counseling in Business and Industry

COUN-473 Introduction to Family Counseling	3 cr.
COUN-474 Advanced Family Counseling	3 cr.
COUN-475 Community Counseling	3 cr.
COUN-476 Grief Counseling	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 objective. 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 Experience

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. Comprehensive Examination

All candidates will be required to pass a comprehensive examination. Candidates may take the examination in the trimester following the one in which all course requirements have been completed. Students must apply to the department to take this examination.

COURSE OFFERINGS

COUN-313 Principles and Techniques of Guidance, 3 cr. An overview of guidance; its definition; the educational and

social scenes in which guidance operates; features of guidance services as they apply in various professional settings.

COUN-321 Diagnosis and Treatment of Reading Difficulties, 3 cr. Survey of standard diagnostic procedures; identification of slow readers through diagnosis, group and individual testing and information techniques; procedures and techniques for correcting reading problems in elementary and secondary schools. **Prereq.:** ELED-306 or consent of instructor.

COUN-413 Group Procedures in Counseling and Personnel Work, 3 cr. Psychological aspects of groups and leadership are introduced; group discussion, group guidance, and group counseling purposes, procedures, roles, and methods to be examined; group participants interact in role playing and group communication. **Prereq.:** graduate standing and COUN-465.

COUN-421 Evaluation Techniques for Counselors, 3 cr. Principles of test construction, basic statistical treatments, and study of commonly used standardized tests and other evaluative procedures. A laboratory experience in the administration and interpretation of tests is an integral part of this course. Student will be expected to do extensive readings and become familiar with recognized authorities in the field. **Prereq.:** graduate standing.

COUN-456 Community Resources and the Schools, 3 cr. Educational, personal, family, social, and vocational services available for elementary school children. **Prereq.:** acceptance to master's degree candidacy in guidance and counseling—elementary school level.

COUN-457 Information and Resources for Secondary School Guidance, 3 cr. Guidance and counseling strategies which facilitate the career development of secondary school students are considered. Specific topics are: the role of the counselor in career education, theories of vocational development, decision making models and processes, guidance techniques to facilitate career exploration and choices, and educational and occupational information sources. **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-313.

COUN-461 Research Seminar in Guidance and Counseling, 3 cr. Designed to acquaint the student with research findings and appropriate research techniques in the areas of guidance and counseling; critical evaluation of research emphasized. **Prereq.:** master's degree candidacy in guidance and counseling and COUN-421.

COUN-462 Practicum I: Guidance and 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: Guidance and 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 and Personnel Work, 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 Techniques for Counseling and Personnel Work, 3 cr. Laboratory experiences to prepare professional personnel engaged in helping relationships; emphasis upon the acquisition of verbal and non-verbal interaction techniques. Principal competencies include relationship techniques, information

gathering, and problem-solving skills. **Prereq.:** graduate standing, COUN-313, 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 Vocational Theory and Occupational Information, 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-313, 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, 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, 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 formats. **Prereq.:** graduate standing, COUN-313 and COUN-464.

COUN-474 Advanced 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. Addressed to the complex counseling needs of the special population within the urban community. Study of the operating procedures and counseling strategies used by various public and private agencies, the legal ramifications of counseling, and the location and use of information necessary for counseling in urban settings. **Prereq.:** graduate standing, COUN-313, and COUN-464.

COUN-476 Grief Counseling, 3 cr. An overview of contemporary attitudes regarding 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 death 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-313, and COUN-464.

CURRICULUM AND INSTRUCTION

Bertram I. Abell, M.S., Professor
 Harvey B. Barrett, Ed.D., Assistant Professor
 Michael J. Belica, Ed.D., Professor
 Janet Bercik, Ed.D., Assistant Professor
 Sherman Beverly, Ph.D., Professor
 Mary Louise Burger, Ed.D., Professor
 Murrell Duster, M.Ed., Assistant Professor
 Brigitte Erbe, Ph.D., Assistant Professor
 Frederick O. Flener, Ph.D., Professor
 Mary Anne Fowler, Ed.D., Professor
 Ethel J. Greene, Ed.D., Professor
 Maurice G. Guysenir, Ph.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., Assistant Professor
 Margaret Lindman, Ed.D., Professor, Chairperson
 James R. Lockwood, Ph.D., Professor
 Patricia L. Mather, Ph.D., Assistant Professor
 Beverly Otto, Ph.D., Assistant Professor
 Betty J. Paden, Ed.D., Professor
 Edward A. Robinson, Ph.D., Professor
 Leonard Setze, 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

Two undergraduate majors in Early Childhood Education are offered by the Department of Curriculum and Instruction. Students who complete the Early Childhood Education major and wish to receive entitlement for Illinois Standard Elementary certificate **must** complete, in addition, the Elementary Education major. The department also offers a minor in Preschool 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.

Furthermore, the department offers a sequence of graduate courses in Early Childhood Education that apply to the Master of Arts degree in Special Education: Early Childhood Education. For further details, please refer to the Special 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 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 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 classrooms 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 (27 credit hours) includes a core of three courses (nine credit hours) plus 18 credit hours of electives selected from four blocks of specified courses. Students wishing to become certified as elementary teachers must also complete the Elementary Education major. (See the Elementary Education section of this catalog.) Minors in preschool education (21 credit hours) and hospital play education (24 credit hours) are also offered by the department.

In cooperation with the Early Childhood Education Program, the Department of Special Education offers the Master of Arts degree in Special Education: Early Childhood Special Education. Students may earn this degree with a course emphasis either in early childhood education or in special education. For additional information see the Special Education section of this catalog.

UNDERGRADUATE PROGRAMS

Major in Early Childhood Education for the Bachelor of Arts Degree

Required Core Courses:

- C&I-ECED-311 Educational Strategies for Teachers of Young Children 3 cr.
 C&I-ECED-318 Programs and Techniques for Teachers Promoting Cognitive and Perceptual Growth in Young Children 3 cr.
 C&I-ECED-326 Principles of Preschool Education 3 cr.

Each of these core courses requires a minimum of three hours per week of clinical experience with children in school settings.

Electives: 18 credit hours selected in consultation with an advisor. See distribution in Blocks A, B, C, and D indicated below.

Block A (6 cr. hrs.)

Select 2 courses:

- C&I-ECED-309 Current Trends in Preschool and Kindergarten Education 3 cr.
 C&I-ECED-313 Language Development and Educational Implications 3 cr.
 C&I-ECED-317 Modern Concepts of Play in the Learning Process 3 cr.
 C&I-ECED-322 Critical Analysis of Preschool Education 3 cr.
 C&I-ECED-323 Orientation to Early Childhood Education 3 cr.
 C&I-ECED-325 Literature for Young Children 3 cr.
 C&I-ECED-336 Non-Sexist Strategies for Parents and Teachers of Young Children 3 cr.
 C&I-ECED-337 Creative and Cognitive Value of Puppetry with Young Children 3 cr.

Block B (6 cr. hrs.)

- C&I-ECED-308 Creative Activities 3 cr.
 C&I-ECED-307 Creative Movement, Music, and Games 3 cr.

Block C (3 cr. hrs.)

Select 1 course:

- C&I-ECED-314 Health and the Preschool Child 3 cr.
 C&I-ECED-316 Parent-Teacher Interaction 3 cr.
 C&I-ECED-334 Dealing with Children and Their Families under Stress 3 cr.

Block D (3 cr. hrs.)

Select one additional ECED course either from the listings above (Blocks A-C) or from the listing of electives below.

- C&I-ECED-303 Instructional Materials in Early Childhood Education 3 cr.
 C&I-ECED-321 Outdoor Education for Young Children 3 cr.
 C&I-ECED-327 Techniques of Group Dynamics and Pupil Supervision for the Young Child 3 cr.
 C&I-ECED-333 Alternatives for Dealing with Children 3 cr.
 C&I-ECED-338 Developmental Assessment of Preschool Children 3 cr.
 C&I-ECED-339 Methods of Developing Cognitive Readiness in the Young Child 3 cr.

COUN-476 Grief Counseling, 3 cr. An overview of contemporary attitudes regarding 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 death 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-313, and COUN-464.

CURRICULUM AND INSTRUCTION

Bertram I. Abell, M.S., Professor
 Harvey B. Barrett, Ed.D., Assistant Professor
 Michael J. Belica, Ed.D., Professor
 Janet Bercik, Ed.D., Assistant Professor
 Sherman Beverly, Ph.D., Professor
 Mary Louise Burger, Ed.D., Professor
 Murrell Duster, M.Ed., Assistant Professor
 Brigitte Erbe, Ph.D., Assistant Professor
 Frederick O. Flener, Ph.D., Professor
 Mary Anne Fowler, Ed.D., Professor
 Ethel J. Greene, Ed.D., Professor
 Maurice G. Guysenir, Ph.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., Assistant Professor
 Margaret Lindman, Ed.D., Professor, Chairperson
 James R. Lockwood, Ph.D., Professor
 Patricia L. Mather, Ph.D., Assistant Professor
 Beverly Otto, Ph.D., Assistant Professor
 Betty J. Paden, Ed.D., Professor
 Edward A. Robinson, Ph.D., Professor
 Leonard Setze, 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

Two undergraduate majors in Early Childhood Education are offered by the Department of Curriculum and Instruction. Students who complete the Early Childhood Education major and wish to receive entitlement for Illinois Standard Elementary certificate **must** complete, in addition, the Elementary Education major. The department also offers a minor in Preschool 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.

Furthermore, the department offers a sequence of graduate courses in Early Childhood Education that apply to the Master of Arts degree in Special Education: Early Childhood Education. For further details, please refer to the Special 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 classrooms 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 (27 credit hours) includes a core of three courses (nine credit hours) plus 18 credit hours of electives selected from four blocks of specified courses. Students wishing to become certified as elementary teachers must also complete the Elementary Education major. (See the Elementary Education section of this catalog.) Minors in preschool education (21 credit hours) and hospital play education (24 credit hours) are also offered by the department.

In cooperation with the Early Childhood Education Program, the Department of Special Education offers the Master of Arts degree in Special Education: Early Childhood Special Education. Students may earn this degree with a course emphasis either in early childhood education or in special education. For additional information see the Special Education section of this catalog.

UNDERGRADUATE PROGRAMS

Major in Early Childhood Education for the Bachelor of Arts Degree

Required Core Courses:

- C&I-ECED-311 Educational Strategies for Teachers of Young Children 3 cr.
 C&I-ECED-318 Programs and Techniques for Teachers Promoting Cognitive and Perceptual Growth in Young Children 3 cr.
 C&I-ECED-326 Principles of Preschool Education 3 cr.

Each of these core courses requires a minimum of three hours per week of clinical experience with children in school settings.

Electives: 18 credit hours selected in consultation with an advisor. See distribution in Blocks A, B, C, and D indicated below.

Block A (6 cr. hrs.)

Select 2 courses:

- C&I-ECED-309 Current Trends in Preschool and Kindergarten Education 3 cr.
 C&I-ECED-313 Language Development and Educational Implications 3 cr.
 C&I-ECED-317 Modern Concepts of Play in the Learning Process 3 cr.
 C&I-ECED-322 Critical Analysis of Preschool Education 3 cr.
 C&I-ECED-323 Orientation to Early Childhood Education 3 cr.
 C&I-ECED-325 Literature for Young Children 3 cr.
 C&I-ECED-336 Non-Sexist Strategies for Parents and Teachers of Young Children 3 cr.
 C&I-ECED-337 Creative and Cognitive Value of Puppetry with Young Children 3 cr.

Block B (6 cr. hrs.)

- C&I-ECED-308 Creative Activities 3 cr.
 C&I-ECED-307 Creative Movement, Music, and Games 3 cr.

Block C (3 cr. hrs.)

Select 1 course:

- C&I-ECED-314 Health and the Preschool Child 3 cr.
 C&I-ECED-316 Parent-Teacher Interaction 3 cr.
 C&I-ECED-334 Dealing with Children and Their Families under Stress 3 cr.

Block D (3 cr. hrs.)

Select one additional ECED course either from the listings above (Blocks A-C) or from the listing of electives below.

- C&I-ECED-303 Instructional Materials in Early Childhood Education 3 cr.
 C&I-ECED-321 Outdoor Education for Young Children 3 cr.
 C&I-ECED-327 Techniques of Group Dynamics and Pupil Supervision for the Young Child 3 cr.
 C&I-ECED-333 Alternatives for Dealing with Children 3 cr.
 C&I-ECED-338 Developmental Assessment of Preschool Children 3 cr.
 C&I-ECED-339 Methods of Developing Cognitive Readiness in the Young Child 3 cr.

C&I-ECED-341	Care and Education of the Infant and Toddler.....	3 cr.
C&I-ECED-342	Developing and Directing Early Childhood Programs.....	3 cr.

Major in Elementary Education

All students seeking an Illinois Standard Elementary Certificate with a kindergarten-primary emphasis must be admitted to the College of Education and must complete the Major in Elementary Education (39 cr. hrs.). Required courses for the first major in Elementary Education for those with a second major in Early Childhood Education are as follows:

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-ECED-301	*Curriculum and Instruction in Early Childhood and Elementary Education	3 cr.
C&I-ECED-302	*Methods of Teaching Language Arts—Primary through Upper Grades	3 cr.
C&I-ECED-304	*Methods of Teaching Social Studies—Primary through Upper Grades	3 cr.
C&I-ECED-305	*Methods of Teaching Science—Primary through Upper Grades	3 cr.
C&I-ECED-306	*Methods of Teaching Reading—Primary through Upper Grades	3 cr.
C&I-ECED-310	*Methods of Teaching Mathematics—Primary through Upper Grades	3 cr.
ECED-312	Teaching Strategies with Multi-Cultural Groups or	
ELED-319	Classroom Organization and Management or	
ELED-320	Teaching the Slow Learning and Gifted Child in the Elementary School	3 cr.
C&I-ECED-329	Student Teaching in Elementary Education.....	9 cr.
Total		39 cr.

NOTE: With approval of program advisor or coordinator, students may enroll in Early Childhood Education courses designated with an * or their equivalent in the Elementary Education Program.

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 in the Elementary Education section of this catalog.

NOTE: All students wishing Chicago teacher certification must take an additional two credit hours of course work in Reading. One of the following two courses will satisfy this additional requirement:

COUN-321	Diagnosis and Treatment of Reading Difficulties.....	3 cr.
READ-311	Fundamentals of Reading Instruction.....	3 cr.

Minor in Preschool Education (21 cr. hrs.)

NOTE: Students who are majors in Early Childhood Education may not select the Minor in Preschool Education to fulfill the University requirements for an area of study in addition to the major.

Prerequisite:

PSYC-212	Child Psychology or
EDFN-306	Education and Individual Differences

Required Core Courses:

C&I-ECED-314	Health and the Preschool Child.....	3 cr.
C&I-ECED-316	Parent-Teacher Interaction	3 cr.
C&I-ECED-320A	Practicum in Early Childhood Alternative Settings: Preschool.....	3 cr.
C&I-ECED-323	Orientation to Early Childhood Education.....	3 cr.
C&I-ECED-339	Methods of Developing Cognitive Readiness in the Young Child	3 cr.
Subtotal		15 cr.

Electives:

Select two courses from the following:		6 cr.
C&I-ECED-303	Instructional Materials in Early Childhood Education	3 cr.
C&I-ECED-308	Creative Activities	3 cr.
C&I-ECED-313	Language Development and Educational Implications	3 cr.
C&I-ECED-317	Modern Concepts of Play in the Learning Process	3 cr.
C&I-ECED-322	Critical Analysis of Preschool Education.....	3 cr.
C&I-ECED-325	Literature for Young Children.....	3 cr.
C&I-ECED-326	Principles of Preschool Education.....	3 cr.
Total		21 cr.

Minor in Hospital Play Education (24 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	12 cr.
Total		24 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 and Elementary Education, 3 cr. The relationship of theory to practice is studied in a variety of early childhood and 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, and (3) evaluation techniques. Strategies for meeting the needs of learning disabled and mainstreamed exceptional children are explored. **Prereq:** EDFN-306.

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 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—Primary through Upper Grades, 3 cr. Examines instructional methods and materials for evaluating readiness, teaching beginning reading, fostering reading interests, and assessing reading performance. Emphasizes the developmental approach to teaching word recognition and reading comprehension

skills to normal, learning disabled, and mainstreamed exceptional children. Supervised clinical experiences in a multicultural elementary school clarify classroom management techniques which facilitate effective individualized, small group and whole class instruction. Emphasis on primary grades. **Prereq:** C&I-ECED-301.

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-311 Educational Strategies for Teachers of Young Children, 3 cr. Emphasis will be upon the relationship and effect that the young child's physical, emotional, intellectual, social, and aesthetic experiences have upon his maturation and learning. Applications of principles and theories which define and explain these growth learning factors will be investigated and supported by direct observation and interaction with children in schools and other settings. A minimum of three hours per week of clinical experience with children in a school setting is required. **Prereq:** PSYC-212 or EDFN-306 or equivalent.

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-306 or equivalent.

C&I-ECED-313 Language Development and Educational Implications, 3 cr. Studies language growth and development of young children with particular emphasis upon programs and techniques designed to facilitate acquisition of language

skills. The relationship of language development and both cognitive and social-emotional growth is explored. Attention is directed primarily toward verbal behavior but non-verbal communication is also considered. Basic language development inventories are reviewed. **Prereq.:** PSYC-212 or EDFN-306 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 Parent-Teacher Interaction, 3 cr. A study in developing necessary strategies and techniques in involving parents in the total education of their children. Emphasis will be placed upon developing the art of listening, observing, and evaluating situations needed to effect cooperation and understanding between the family and school. This will be achieved through field experiences, attendance at various school board and related meetings, and parent-teacher conferences, with follow-up discussions and seminars. **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-306 or equivalent.

C&I-ECED-318 Programs and Techniques for Teachers Promoting Cognitive and Perceptual Growth In Young Children, 3 cr. An in-depth study of the recent trends and modifications in research on the cognitive and perceptual development of young children. These intellectual areas will be measured through the use of language solving problems. Implications for the teacher and applications to the classroom setting will be stressed. Careful observation of children in a variety of settings will be made within the limits of available resources. A minimum of three hours per week of clinical experience with children in school settings. **Prereq.:** C&I-ECED-311.

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-306 or PSYC-212 or equivalent.

C&I-ECED-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. Fulfills a minimum of 100 clock hours of clinical experiences required by the state for certification. **Prereq.:** consent of department chairperson.

C&I-ECED-329 Student Teaching in Elementary Education, 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 a class of elementary school students. Weekly two-hour seminars. Regular visits and conferences with university supervisors. **Prereq.:** completion of required professional education 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 education 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-306 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-306 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-306, 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-306 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-306 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, burn-out, 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-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 co-operative 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-306, plus six additional credits in early childhood education.

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-306 or equivalent.

C&I-ECED-407 Family, Child, and Teacher Interaction 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-302; 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., Assistant Professor
Daniel R. Bock, Ed.D., Professor
Vernon Braun, Ed.D., Assistant Professor
Richard H. Brewer, Ph.D., Professor
Jean B. Carlson, Ph.D., Professor, Chairperson
Barbara Cook, J.D., Assistant Professor
Phyllis Goldblatt, Ph.D., Professor
Nancy Green, Ph.D., Professor
Sharon McNeely, M.S., 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 Education and Individual
Differences (or EDFN-418H).....3 cr.
EDFN-307 Psychology of Instruction and
Learning (or EDFN-401).....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.

EDFN-316 Computer Utilization in Education.....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, degree requirements, and course offerings.

Master of Arts in Educational Administration and Supervision

Northeastern Illinois University offers the Master of Arts degree in cooperation with Chicago State University and Governor's State University.

Requirements for Admission to the Program:

In addition to the requirements of the Graduate College 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 degree only, a grade point average of 3.75 (on a 5.0 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:

- Selection of a sequence in Administration, School Business Official, or Community College Administration.
- Completion of 33 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 (33 cr. hrs.)

EDFN-421	Administration and Organization of Public Education	3 cr.
----------	---	-------

EDFN-424	Educational Supervision	3 cr.
EDFN-413	Human Relations in Educational Settings	3 cr.
EDFN-401	Learning Theories and Educational Practice	3 cr.
EDFN-431	School Community Relations	3 cr.
EDFN-422	Administration and Supervision of the Elementary School or	
EDFN-423	Administration and Supervision of the Secondary School	3 cr.
EDFN-429	Research Seminar in Administration	3 cr.
EDFN-434	Administration Practicum I	3 cr.
EDFN-435	Administration Practicum II	3 cr.
Approved Electives		6 cr.
Total		33 cr.

School Business Official Concentration (33 cr. hrs.)

EDFN-432	School Business and Finance	3 cr.
EDFN-438	Collective Negotiations	3 cr.
EDFN-470	Uses of the Microcomputer for School Administrators and Supervisors	3 cr.
EDFN-421	Administration and Organization of Public Education	3 cr.
EDFN-433	School Law for Teachers and Administrators	3 cr.
EDFN-429	Research Seminar in Administration	3 cr.
EDFN-434	Administration Practicum I	3 cr.
EDFN-435	Administration Practicum II	3 cr.
Approved Electives		9 cr.
Total		33 cr.

Community College Concentration (33 cr. hrs.)

EDFN-421	Administration and Organization of Public Education	3 cr.
EDFN-413	Human Relations in Educational Settings	3 cr.
EDFN-418F	Seminar in Development and Learning: The Adult Learner	3 cr.
EDFN-431	School Community Relations	3 cr.
EDFN-429	Research Seminar in Education	3 cr.
EDFN-430	The Community College	3 cr.
EDFN-434	Administration Practicum I	3 cr.
EDFN-435	Administration Practicum II	3 cr.
HLD-9831	Community College Administration (at Governor's State University)	3 cr.
Approved Electives		6 cr.
Total		33 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:

- A master's degree from an accredited institution of higher learning.
- Admission to the Graduate College.
- 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.

- Written recommendations from two school officials.
- The student must provide evidence of having passed both the State of Illinois and the United States Constitution examinations.

Program Requirements:

General Administrative Program (24 cr. hrs.)

EDFN-421	Administration and Organization of Public Education	3 cr.
EDFN-424	Educational Supervision	3 cr.
EDFN-422	Administration and Supervision of the Elementary School	3 cr.
EDFN-423	Administration and Supervision of the Secondary School	3 cr.
EDFN-401	Learning Theories and Educational Practice	3 cr.
EDFN-413	Human Relations in Educational Settings	3 cr.
EDFN-434	Administration Practicum I	3 cr.
EDFN-435	Administration Practicum II	3 cr.
Total		24 cr.

Chief School Business Official Program (21 cr. hrs.)

EDFN-421	Administration and Organization of Public Education	3 cr.
EDFN-432	School Business and Finance	3 cr.
EDFN-433	School Law for Teachers and Administrators	3 cr.
EDFN-438	Collective Negotiations	3 cr.
EDFN-470	Uses of the Microcomputer for Teachers and School Administrators	3 cr.
EDFN-434	Administration Practicum I	3 cr.
EDFN-435	Administration Practicum II	3 cr.
Total		21 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-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. *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; Multi-cultural Education; and Education in New China. *Prereq.*: junior standing or consent of instructor.

EDFN-316 Computer Utilization in Education, 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, overview of programming languages and packaged programs, and use in research. *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, and psychoanalysis. 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-401 Learning Theories and Educational Practice, 3 cr. Study of both behavioral and cognitive learning theories, their illustration in the classroom, and review of recent research. Classroom observations required. *Prereq.*: graduate standing, 12 credit hours in professional education, or consent of instructor.

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 examination 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-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 in Educational Settings, 3 cr. Study of basic concepts and principles of interpersonal relationships and dynamics of groups. Emphasis on theory and application. Students will learn to observe and assess interpersonal and group dynamics and learn effective interaction skills in role playing situations. Designed for teachers, trainers, supervisors, administrators, school service personnel, and community leaders. *Prereq.*: graduate standing and 12 credit hours in professional education or consent of instructor.

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, modeled 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. Observation in secondary level classrooms required. *Prereq.*: graduate standing, 12 credit hours of professional education or consent of instructor.

EDFN-421 Administration and Organization of Public Education, 3 cr. Introduction to the study of educational administration with emphasis upon the nature of the administrative process and administrative theory; an overview of structure, governance, and policy of public education at the local, state, and federal levels including legal, business, financial, and personnel matters. *Prereq.*: graduate standing and 12 credit hours of professional education or consent of instructor.

EDFN-422 Administration and Supervision of the Elementary School, 3 cr. An examination of the elementary school with emphasis upon the role of the principal and his relationship with personnel; administrative behavior analyzed in terms of tasks and processes that aid in improving educational programs; staff development, curriculum development, and action research; opportunity to solve problems with simulated material. *Prereq.*: graduate standing and EDFN-421.

EDFN-423 Administration and Supervision of the Secondary School, 3 cr. An examination of the secondary school with emphasis upon the role of the principal with the professional staff and community. The nature of supervision and the leadership function are related to the principals' role in developing educational tasks and processes in secondary school administration. Use of case studies and simulated material. *Prereq.*: graduate standing and EDFN-421.

EDFN-424 Educational 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. *Prereq.*: graduate standing and EDFN-421.

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; EDFN-422 or EDFN-423.

EDFN-429 Research Seminar in Administration, 3 cr. Emphasis on formulating testable hypotheses with appropriate research and statistical design; critical interpretation and analysis of administrative research with particular reference to the public schools. *Prereq.*: graduate standing and nine credit hours in administration.

EDFN-431 School-Community Relations, 3 cr. An analysis of the role of school policy in the modern community, community power structure and resources, the social and political context, and the principles of school-community relations in the context of social change; evaluation of communication between school and community. *Prereq.*: graduate standing and EDFN-421.

EDFN-432 School Business Finance, 3 cr. The functions and processes of school business administration; budgetary processes, salary, transportation, contracts, liabilities, and managing facilities and organizational and governmental structures relevant to public school finance. Students will have an opportunity to solve problems in simulated situations. *Prereq.*: graduate standing and EDFN-421.

EDFN-433 School Law for Teachers and Administrators, 3 cr. A survey of legal principles and their application to the school. Consideration of legal rights, privileges, responsibilities, immunities, and authority of the state and federal government of school board members, administrators, teachers, and students. *Prereq.*: graduate standing and 12 credit hours of education.

EDFN-434 Administration Practicum I, 3 cr. The major purpose of the field practicum is to provide the student with a supervised experience in the functions and duties associated with roles in educational administration and supervision. Each student will participate in three of the following administrative areas: school organization, instruction management, staff and curriculum development, a school assessed research study, community relations, pupil personnel supervisory services, and a school climate research study. Group seminars, a log describing on-going activities, and an annotated bibliography related to practicum activities are required. *Prereq.*: graduate standing, EDFN-421, EDFN-422 or EDFN-423; EDFN-424 and two additional graduate courses in educational administration or consent of instructor.

EDFN-435 Administration Practicum II 3 cr. The major purpose of the field practicum is to provide the student with a supervised experience in the functions and duties associated with roles in educational administration and supervision. Each student will participate in a wide range of activities related to school organization, instruction management, staff and curriculum development, community relations, pupil personnel services, and a school climate research study. Group seminars, a log describing on-going activities, and an annotated bibliography related to practicum activities are required. *Prereq.*: graduate standing, EDFN-434 or taken concurrently with EDFN-434 or equivalent courses from the other cooperative universities, and consent of instructor.

EDFN-436 Administration of School Personnel, 3 cr. Provides a general understanding of the personnel functions in education. Decision-making and problem-solving in school personnel administration and supervision will be emphasized. Functions of recruiting, assignment, development, coordination, compensation, appraisal negotiations, in-service education, motivation, and dismissal are included. *Prereq.*: graduate standing and EDFN-421.

EDFN-437 Independent Study in Educational Administration, 3 cr. In-depth examination of special areas in educational administration. *Prereq.:* graduate standing, consent of instructor, and six credit hours in educational administration.

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-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 Uses of the Micro-Computer for School Administrators and Supervisors, 3 cr. An examination of the use of micro-computers in educational administration and supervision. Topics include: introduction to computers, overview of principles underlying computer-assisted instruction and computer-managed instruction, overview and use of available software, internal monitoring and program evaluation, and elementary programming. *Prereq.:* graduate standing and EDFN-421 or consent of instructor.

EDFN-480 The Community College, 3 cr. This course 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. A problem centered approach will be used as the method for examining current data from the literature. *Prereq.:* graduate standing and college experience or consent of instructor.

ELEMENTARY EDUCATION

Leonard Setze, Ed.D., Professor, Coordinator
(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.

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-301	*Curriculum of the Elementary School	3 cr.
C&I-ELED-302	*Methods of Teaching Language Arts — Elementary School	3 cr.
C&I-ELED-304	*Methods of Teaching Social Studies — Elementary School	3 cr.
C&I-ELED-305	*Methods of Teaching Science — Elementary School	3 cr.
C&I-ELED-306	*Methods of Teaching Reading — Elementary School	3 cr.
C&I-ELED-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-320 **Teaching the Slow-Learning and Gifted Child..... 3 cr.
- (c) C&I-ECED-312 Teaching Strategies with Multicultural Groups..... 3 cr.

C&I-ELED-329	Student Teaching in Elementary Education, K-9	9 cr.
Total		39 cr.

• **NOTE:** With approval of program advisor or coordinator, students may enroll in Elementary Education courses designated with an * or their equivalent in the Early Childhood Education program.

** 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. One of the following two courses will satisfy this additional requirement:

COUN-321	Diagnosis and Treatment of Reading Difficulties.....	3 cr.
READ-311	Fundamentals of Reading Instruction	3 cr.

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.
Electives	9 cr.

Natural Sciences (12 hours)	
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.

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-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. Elements of Science of Teaching are included. *Prereq:* EDFN-306.

C&I-ELED-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 multi-cultural settings. Attention given to mainstreaming the exceptional child and learning disabled in the regular elementary school classroom. Elements of the Science of Teaching are included. Emphasis on middle and upper grades. *Prereq:* C&I-ELED-301.

C&I-ELED-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. Elements of Science of Teaching are included. *Prereq:* C&I-ELED-301.

C&I-ELED-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 as well as the Science of Teaching. 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-301.

C&I-ELED-306 Methods of Teaching Reading—Elementary School, 3 cr. Examines instructional methods, materials and other information concerning the various methods for teaching reading, acquaintance with recent research and controversial issues. Emphasis will be given to methods of teaching fundamental reading skills to normal and mainstreamed exceptional children in multicultural classrooms. Appropriate classroom management techniques and elements of the Science of Teaching are included. 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-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-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 and elements of the Science of Teaching are included. May be accompanied by sequential, supervised clinical experiences culminating in teaching student-developed instructional units. *Prereq:* C&I-ELED-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-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. Elements of the Science of Teaching are included. *Prereq:* C&I-ELED-301.

C&I-ELED-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-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-301 and consent of chairperson.

C&I-ELED-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 Elementary 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. Elements of the Science of Teaching are included. *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. Elements of the Science of Teaching are included. *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. Elements of the Science of Teaching are included. *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. Elements of the Science of Teaching are included. *Prereq:* graduate standing and consent of instructor.

HEALTH, PHYSICAL EDUCATION, RECREATION, AND ATHLETICS

Daniel Creely, Ed.S., Associate Professor

Ronald Faloon, M.P.E.H., Assistant Professor,
Athletic Coordinator

Betty Fields, M.P.E.H., Assistant Professor,
Assistant Athletic Coordinator

Frank Hostetler, H.S.D., Professor

Violet Johnson, M.Ed., Assistant Professor

Leonard Kaminsky, Ph.D., Assistant Professor

Mitchell Kanter, Ph.D., Assistant Professor

Raymond Kasper, M.S., Assistant Professor

Janet LaHam-Saeger, M.S., Instructor

Joan Leafman, M.S., Assistant Professor,

Intramural Sports and Recreation Coordinator

George Lesmes, Ph.D., Professor, Human Performance
Laboratory Coordinator

Sam Lollar, Ph.D., Assistant Professor

Betty Meyer, M.A., Associate Professor,
Academic Program Coordinator

Noel Nequin, M.D., Visiting Lecturer,

Human Performance Laboratory

Dolores Petty, M.A., Associate Professor

Eleonor Prieske, 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 offers two Bachelor of Arts Degrees and a Master of Science Degree in Exercise Physiology and Cardiac Rehabilitation.

Undergraduate majors are:

Leisure Studies

Physical Education

Secondary Physical Education

Undergraduate minors are:

Driver Education

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-DRED, -HLED, -LEST, -PEMA, -PEMT prefixes)

Serving the entire university community, the department is concerned with educating students in health, physical education, recreation, physical well-being, and leisure time activities. Extra-curricular 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 3.7 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.

"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-HLED-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-PEMT-201	Principles and Methods in Physical Education	3 cr.
HPER-PEMT-204	Physiology of Exercise	3 cr.
HPER-PEMT-302	Kinesiology	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:		2 cr.
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:		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-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 and the 38 credit hour Secondary Physical Education Major. Students are encouraged to complete one or more minor programs; eg., Driver Education and/or Health Education. **Student Teaching for this program is scheduled for the Winter term only.**

Unique to the Secondary Physical Education Major is the Block Program which is taken during the Fall Trimester 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:		3 cr.
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:		2 cr.
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:		12 cr.
HPER-PEMA-344	Foundations of Physical Education for Secondary Schools	3 cr.
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:		2 cr.
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.

Required Courses:

Leisure Studies Core:

HPER-LEST-201	Principles and 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 Driver Education (18 cr. hrs.)

Required Courses:

HPER-DRED-301	General Safety and Traffic Education	3 cr.
HPER-DRED-302	Basic Driver Education	3 cr.
HPER-DRED-304	Advanced Traffic Safety Education	3 cr.

Electives: 9 cr.
Electives to be selected in consultation with advisor.

Total 18 cr.

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 require-
 ment 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.

GRADUATE PROGRAM**Master of Science in Exercise Physiology 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 preventative and re-
 habilitative physiology, wellness, and health promotion.

The program is designed for students from 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 condi-
 tions. In addition, emphasis will be placed on the rehabilitation of
 individuals with cardiovascular disorders.

Practical applications of physiological concepts, in addition to re-
 search and physical evaluations, are an integral part of the pro-
 gram. The major portion of the work will be conducted in the
 Human Performance Laboratory, and all students will work under
 the guidance of a graduate advisor.

A three month internship and a 300-hour "preceptorship" are
 required in the program. This is designed to provide practical
 work experience in the Human Performance Laboratory, the
 Adult Fitness Program, and selected clinical settings.

Two program options are available.

Option I is designed for individuals presently working in adult
 fitness, industrial fitness, health promotion, wellness programs,
 or cardiac rehabilitation programs, and those whose master of
 science degree will be their terminal degree.

Option II is designed for individuals who will continue with post-
 master's work.

Requirements for Admission to the Program:

1. Students must fulfill the requirements for admission to the Graduate College.
2. Minimum of 21 credit hours of undergraduate course work 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. Three letters of recommendation.
4. A statement of goals and purposes for pursuing the degree.
5. Previous experience in the area of exercise physiology and/or cardiac rehabilitation is desirable.

Requirements for the Degree:

The program consists of 36 credit hours of which eight "core" courses or 27 credit hours are required.

HPER-PEMT-331 Cardiovascular and Metabolic
 Physiology in Cardiac Rehabilitation 3 cr.
 HPER-PEMT-332 Methods and Procedures of
 Graded Exercise Testing 3 cr.
 HPER-PEMT-333 Cardiovascular Pharmacology
 in Cardiac Rehabilitation 3 cr.
 HPER-PEMT-401 Clinical Dimensions of Cardiac
 Rehabilitation 3 cr.
 HPER-PEMT-402 Clinical Electrocardiography 3 cr.
 HPER-PEMT-403 Statistical Analysis in Exercise
 Physiology and Cardiac Rehabilitation 3 cr.
 HPER-PEMT-404 Research Design in Exercise
 Physiology/Cardiac Rehabilitation 3 cr.
 HPER-PEMT-419 Internship: Exercise Physiology/
 Cardiac Rehabilitation 6 cr.
 Total 27 cr.

Option I

In addition to the "core" requirements above, 9 hours of elec-
 tives must be completed from the elective list below.

Electives - 9 credit hours

Program total - 36 credit hours

Option II

In addition to the "core" requirements, the following must be
 completed:

HPER-PEMT-420 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:

HPER-PEMT-411 Independent Study in Exercise
 Physiology/Cardiac Rehabilitation 1 cr.
 HPER-PEMT-412 Independent Study in Exercise
 Physiology/Cardiac Rehabilitation 2 cr.
 HPER-PEMT-413 Independent Study in Exercise
 Physiology/Cardiac Rehabilitation 3 cr.
 HPER-PEMT-420 Research Thesis 6 cr.
 HPER-PEMT-421 Advanced Cardiovascular Physiology
 in Cardiac Rehabilitation 3 cr.
 HPER-PEMT-422 Metabolic Adaptations to Physical
 Stress 3 cr.
 HPER-PEMT-423 Seminar in Exercise Physiology
 and Cardiac Rehabilitation 3 cr.
 HPER-PEMT-423A Seminar: Sports Physiology 3 cr.
 HPER-PEMT-423B Seminar: Advanced Exercise
 Physiology 3 cr.
 HPER-PEMT-423C Seminar: Corporate and Industrial
 Fitness 3 cr.
 HPER-PEMT-423D Seminar: Pathophysiology 3 cr.

HPER-PEMT-424 Nutritional Alternatives in Cardiac
 Rehabilitation and Other Disease States 3 cr.
 HPER-PEMT-425 Pulmonary Physiology in Cardiac
 Rehabilitation 3 cr.

In addition to the requirements of the Graduate College for ma-
 triculation in graduate programs, students in the master's pro-
 gram in Exercise Physiology and Cardiac Rehabilitation are al-
 lowed 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.

Human Performance Laboratory

In 1978, because of the growing concern for health and physical
 fitness, the Department of Health, Physical Education, Recrea-
 tion, and Athletics established the Human Performance
 Laboratory.

The Human Performance Laboratory contains space for exercise,
 evaluation, physiological testing, and a complete blood and his-
 tochemical laboratory.

The goals of the Human Performance Laboratory, which are to
 teach, provide community service and conduct research, reflect
 the urban mission of the university. The Master of Science in
 Exercise Physiology/Cardiac Rehabilitation trains persons to
 work in hospitals, schools, rehabilitation institutes, wellness and
 health promotion, and health centers. The adult fitness classes
 provide participants with activities and knowledge that contrib-
 ute to healthful living. Ongoing research studies conducted by
 faculty and graduate students add to the base of information re-
 garding human health.

COURSE OFFERINGS**Driver Education**

HPER-DRED-301 General Safety and Traffic Education, 3 cr. This course provides information needed by the driver edu-
 cation teacher, safety coordinator, and the school administrator,
 in planning and conducting traffic education programs. In addi-
 tion to the study of several areas of school safety and liability,
 students receive one credit hour of field experience in the use of
 simulation equipment as it is used in high school driver
 education.

HPER-DRED-302 Basic Driver Education, 3 cr. A study of
 high school driver education is presented, reviewing the objec-
 tives, problems, solutions, and learning activities for classroom
 instruction. Students receive instruction related to teaching in a
 dual-control automobile. This will include one credit hour of field
 experience which deals with judgements and decisions during
 traffic situations.

HPER-DRED-304 Advanced Traffic Safety Education, 3 cr. The organization, supervision, and administration of a state
 driver education program. A study of management practices as
 they relate to programs, teachers, and students is examined.
 Practice in planning programs, facilities, and equipment are re-
 viewed with emphasis on state legislative and educational re-
 quirements. Also included is one credit hour of field experience in
 methods and techniques of multi-car range program instruction.

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 Heart 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-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, lay-outs, 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-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-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-210 Adult Fitness, 2 cr. This fitness course is intended to motivate, instruct, and initiate an active adult life style. A complete battery of physiological tests will be used to determine initial and final fitness, and will also aid in the description of the right duration, type, intensity, and frequency of exercise on an individual basis. *Prereq.:* consent of instructor.

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 of 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-281 Advanced Life Saving, 1 cr. Theoretical and practical work leading to the American Red Cross Advanced Life Saving Certificate. Swimming ability required.

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-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. *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 tha 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-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.

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.

HPER-PEMT-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.

HPER-PEMT-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 referral procedures, data interpretation, protocol, and equipment. *Prereq.:* admission to the master of science degree program and consent of instructor.

HPER-PEMT-333 Cardiovascular Pharmacology in Cardiac Rehabilitation, 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.:* HPER-PEMT-332 and consent of instructor.

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 cardiovascular fitness. Emphasis upon the development of a personal aerobics exercise program.

HPER-PEMT-401 Clinical Dimensions of Cardiac Rehabilitation, 3 cr. Course is designed to acquaint the student with various common clinical states and diseases effecting the cardiovascular system with primary emphasis on coronary artery disease. Diagnosis, treatment, and various aspects of cardiac rehabilitation will be emphasized. *Prereq.:* graduate standing, HPER-PEMT-332 and HPER-PEMT-402.

HPER-PEMT-402 Clinical Electrocardiography, 3 cr. Course is designed to acquaint the student with the basics of normal and abnormal resting and exercise electrocardiogram. Special attention will be given to the thorough study of clinical electrocardiograms and intensive investigations of documented clinical case studies. *Prereq.:* graduate standing and HPER-PEMT 332.

HPER-PEMT-403 Statistical Analysis in Exercise Physiology 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 HPER-PEMT-332.

HPER-PEMT-404 Research Design in Exercise Physiology 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 HPER-PEMT-332

HPER-PEMT-411 Independent Study in Exercise Physiology/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 written report on a project agreed upon by the student and advisor. *Prereq.:* graduate standing and consent of instructor.

HPER-PEMT-412 Independent Study in Exercise Physiology/Cardiac Rehabilitation, 2 cr. (See HPER-PEMT-411 for description)

HPER-PEMT-413 Independent Study in Exercise Physiology/Cardiac Rehabilitation, 3 cr. (See HPER-PEMT-411 for description)

HPER-PEMT-419 Internship: Exercise Physiology and Cardiac Rehabilitation, 6 cr. Designed to provide the student

with work experiences in a clinical, agency, or institutional environment. In addition, American College of Sports Medicine and Advanced Cardiac Life Support procedures and certification are included. **Prereq:** graduate standing and consent of instructor.

HPER-PEMT-420 Research Thesis, 6 cr. Faculty guidance for students conducting research and writing a thesis to fulfill the requirements of the Master of Science in Exercise Physiology and Cardiac Rehabilitation. **Prereq:** graduate standing and consent of instructor.

HPER-PEMT-421 Advanced Cardiovascular Physiology in Cardiac Rehabilitation, 3 cr. Mechanisms of control of the cardiovascular system as they pertain to man at rest and undergoing 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 HPER-PEMT-333.

HPER-PEMT-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 HPER-PEMT-333.

HPER-PEMT-423 Seminar in Exercise Physiology/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 HPER-PEMT-333.

HPER-PEMT-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 HPER-PEMT-333.

HPER-PEMT-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 pathophysiologic consequences of partial impairment of the respiratory processes. Special emphasis will be directed to the rehabilitation of cardiac patients. **Prereq:** graduate standing and HPER-PEMT-333.

HPER-PEMT-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 interactions and proper food selection for healthy people and patients with cardiovascular disease. **Prereq:** graduate standing, HPER-PEMT-333 and HPER-PEMT-424.

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 develop the knowledge and competencies necessary to meet the increasing needs that organizations have for educator/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

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.
HRD-329 Internship and Seminar in Human Resource Development.....	9 cr.
Subtotal	21 cr.

Human Resource Development Electives..... 12 cr.
Each student, in consultation with the program coordinator and/or advisor, will select 12 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.

Additional Area of Concentration..... 18-33 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 INMD/EDFN-316 Computer Utilization in Education, and INMD-351 Selection, Utilization and Evaluation of Instructional Materials 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

The Master's program is designed to prepare 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.

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 in Educational Settings.....	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 Teaching/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-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-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. Internships 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-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-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-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-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-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 Haymon, Ph.D., Professor
Charles Knox, J.D., Assistant 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
Annelyne 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.

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		8 cr.
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:

- understand the role played by the Mexican/Caribbean peoples in the modern world;
- appreciate the similarities and diversities among various Mexican/Caribbean peoples;
- understand the socio-political and economic conditions under which Mexican/Caribbean peoples live;
- develop knowledge and appreciation of the language and literature of the Mexican/Caribbean peoples; and
- 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 is 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 para-professional (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

Michael J. Belica, 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.

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 city of Chicago Teacher-Librarian Certificate and/or 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-406	Advanced Studies in Technical Processes	3 cr.
C&I-INMD-408	The School Media Program	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-362	Television and Related Instructional Media	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-417	Microcomputer Applications for School Libraries	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 trimester 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.:* C&I-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.:* C&I-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-362 Television and Related Instructional Media, 3 cr. Intensive Treatment of the most effective methods of utilizing television as an instrumental medium. Designed to help teachers prepare lessons for actual closed circuit presentation and to familiarize them with a television lesson format. Students will work with professional television equipment as well as with instructional devices related to teaching, such as projectors, bulletin boards, transparencies, and many other visual aids. All TV presentations will be video-taped.

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. Analysis and evaluation of the impact of microcomputer technology in libraries. Emphasis on programming with an aim to producing quality software for utilization in many aspects of library service - cataloging, reference, circulation, and acquisitions to inventory procedures. *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-462 Advanced Television Production for Instructional Applications, 3 cr. A continuation and expansion of production techniques acquired in a basic course. Two camera systems, video editing, set design, and construction, as well as the use of special effects, will be emphasized to the extent that each is related to the production of modules of instruction to meet specific learning outcomes via television. *Prereq.:* graduate standing and C&I-INMD-362.

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, keyword 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

Leonard Setze, Ed.D., Professor, Coordinator

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.)

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-421).
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 in Educational Settings or	
C&I-ELED-414	Principles of Curriculum Development	3 cr.
C&I-SCED-421	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 an advisor.

Linguistics: 3 cr.
A minimum of one 3 credit hour course. The following are recommended:

LING-302	Linguistics for Language Teachers	
LING-306	Linguistics and Reading	
LING-419	Fundamentals of Modern Linguistics	
LING-481	Principles 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
Theresa Booker, Ph.D., Professor
William G. Brozo, Ph.D., Assistant Professor
Linda Crafton, Ed.D., Associate Professor
Ahmed A. Fareed, Ph.D., Professor
Lucille Mozzi, M.A., Associate Professor
Margaret Richek, Ph.D., Associate 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.

BASIC SKILLS PROGRAM

The Basic Skills Program accommodates the specific reading needs of Northeastern students in relation to various academic settings. A two course sequence, READ-095 Reading Workshop and READ-101B Reading Development: Comprehension is offered to meet individual differences. Courses are also offered for developing vocabulary, study skills and speed of comprehension. Students are advised to enroll in selected courses based on placement test results. A Reading Lab is available to students for tutoring in reading. Students should see the Reading Department for information about the Reading Lab.

READING/REASONING PROGRAM

The Reading/Reasoning Program's goal is to develop the analytical reading/reasoning skills prerequisite to students' success in the General Education Program. Through assessment and diagnostic procedures, individuals' needs are identified. Classes are offered in critical reasoning and reading across disciplines represented in the General Education Program. Demonstrations, classes, and workshops in mediational techniques in reading/reasoning are provided for in-service teachers.

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 Difficulties	3 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 Reading	3 cr.

Choose **one** of the following: 3 cr.
ENGL-391 Children's Literature 3 cr.
C&I-ECED-325 Literature for Young Children 3 cr.
C&I-INMD-335 Reading Guidance in the Elementary School 3 cr.

Electives 6 cr.
Choose **two** of the following:
READ-314 Teaching Reading to the Educable Mentally Handicapped Child **or**
SPED-332 Reading for the EMH Child 3 cr.
READ-313 Materials for Reading 3 cr.
READ-323(A-M) Reading Strategies 3 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 School	3 cr.
READ-301	Teaching Reading in Junior and Senior High School	3 cr.
READ-302	Teaching Reading in the Content Areas	3 cr.

Requirements for the Degree:

Required Courses:

READ-313	Materials for Reading	3 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 Reading	3 cr.
READ-404	Clinical Practicum in Reading	3 cr.
READ-405	Research Seminar in Reading	3 cr.
Electives		12 cr.

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 three hours of credit. The course, READ-406 Thesis Seminar: Reading, would take the place of one elective.

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 will develop the prerequisite reading skills and strategies necessary to comprehend and recall college text material. Strengths and weaknesses will be identified through diagnosis and self-assessment. The course will concentrate on preparing for better understanding before reading, solving comprehension problems during reading, and extending comprehension after reading. Specific comprehension

strategies developed are previewing, idea mapping, inferencing, comprehension monitoring, using textbook structure, integrating, adjusting speed, reading selectively, recalling, and understanding complex sentences and unfamiliar vocabulary.

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-301 Teaching Reading in Junior and Senior High School, 3 cr. Designed to explore theory, methodology, and problems involved in teaching reading at the junior and senior high school levels. Reading is viewed from a developmental perspective with emphasis 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 also 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. Designed as 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. Principles of classroom evaluation are introduced. 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. Designed to provide students with opportunities to develop and analyze significant principles involved in the selection and evaluation of commercial reading materials, including traditional and non-traditional beginning 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. Pilot projects utilizing one or more sets of materials with specific kinds of learners are developed and evaluated. **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: Title Varies, 1 cr. Designed to treat special topics in reading of an instructional nature. Courses will concentrate on current 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: Title Varies, 2 cr. (See READ-321 for description.)

READ-323 Reading Strategies: Title Varies, 3 cr. (See READ-321 for description.)

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. Clinical experience in diagnosis and remediation of reading disability cases. Students will diagnose and give remedial reading treatments to disabled individuals and small groups under supervision. **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. Designed to acquaint 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, 3 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 causal 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: Title Varies, 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-412 Measurement and Evaluation of Reading, 3 cr. Designed to introduce the student 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

Michael J. Belica, 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
- Foreign Languages:
 - French
 - Spanish
- Geography
- History
- Mathematics
- Music
- Physical Education
- Physics
- Social Science
- 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.

A. 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.

Foreign Languages

Both Majors in French and Spanish for the Bachelor of Arts Degree meet 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.

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.

B. 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, including one course in American history and/or government;
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 185 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.

C. 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.

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 during the professional trimester with C&I-SCED-304 and C&I-305E. **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. To be taken during the professional trimester with C&I-SCED-303E and C&I-SCED-304. **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 organizational 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 during the professional trimester 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 during the professional trimester 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. To be taken during the professional trimester with SCED-303M and C&I-SCED-304. 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-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.

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.

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 during the professional trimester with C&I-SCED-304 and C&I-SCED-305S. **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. To be taken during the professional trimester with C&I-SCED-304 and C&I-SCED-303S. **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

Mary Anne Bell, Ed.D., Professor
Dorothy Bernstein, Ph.D., Associate Professor
Rita Brusca, M.A., Assistant Professor
Sharon Coben, Ph.D., Assistant Professor

Rosemary Egan, Ph.D., Professor
 Edmund B. Hunt, Ph.D., Associate Professor
 Kenneth James, Ph.D., Associate Professor
 Stephen Lapan, Ph.D., Professor
 Janet Lerner, Ph.D., Professor
 Barbara Lowenthal, Ed.D., Assistant Professor
 Jeffrey Messerer, Ph.D., Associate Professor
 Lynne Reynolds, Ph.D., Associate Professor
 Thomas Schevers, Ph.D., Associate Professor
 Martin Steigman, Ph.D., Professor
 Glen Thompson, Ph.D., Professor
 Lillian Vittenson, Ph.D., Professor
 Patricia Walsh, Ph.D., Associate Professor,
 Chairperson

UNDERGRADUATE PROGRAM

This program trains teachers in adherence to the mandate of Public Law 94-142: that each child is entitled to a free and appropriate public education to be provided by trained teachers and other professionals in a setting which represents, for him or her, the least restrictive environment.

Major in Special Education for the Bachelor of Arts Degree

The major in Special Education is designed to meet:

1. the university's basic academic requirements;
2. state teacher certification requirements;
3. specific training needs in special education.

Special Education majors need experience in regular classroom settings and, therefore, complete the major in Elementary Education. (See the Elementary Education section of this catalog.)

The major in Special Education prepares teachers in three areas of Special Education: (a) mental retardation, (b) learning disabilities, and (c) behavior disorders.

All three Special Education major sequences have the following 24 credit hours of core course requirements:

C&I-ELED-320	Teaching the Slow Learning and Gifted Child in Elementary School	3 cr.
EDFN-306	Education and Individual Differences	3 cr.
SPED-300	Supervised Field Experience I	3 cr.
SPED-303	Measurement and Evaluation	3 cr.
SPED-304	Psychology of Exceptional Children or	
SPED-204	The Exceptional Individual in School and Society	3 cr.
SPED-311	Teaching Individuals with Learning Disabilities	3 cr.
SPED-312	Assessment of Exceptional Individuals	3 cr.
SPED-321	Teaching Individuals with Behavior Disorders	3 cr.
	Subtotal	24 cr.

Students also must select and complete one of the following sequences:

Mental Retardation Sequence

SPED-330	Characteristics of Individuals with Mental Retardation	3 cr.
SPED-331	Teaching Individuals with Mental Retardation	3 cr.

SPED-339	Practice Teaching with Educable Mentally Handicapped Children	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.
	Subtotal	15 cr.

NOTE: SPED-332 Reading for the Educable Mentally Handicapped Child, 3 cr., is a recommended elective.

Learning Disabilities Sequence

SPED-310	Characteristics of Individuals with Learning Disabilities	3 cr.
SPED-320	Characteristics of Individuals with Behavior Disorders	3 cr.
COUN-321	Diagnosis and Treatment of Reading Difficulties	3 cr.
SPED-319	Practice Teaching-Learning Disabilities	6 cr.
	Subtotal	15 cr.

NOTE: SPED-305 Principles of Speech Pathology for the Classroom Teacher, 3 cr., or SPED-302 Psychology of Language and Cognitive Development, 3 cr., is a recommended elective.

Behavior Disorders Sequence

SPED-313	Characteristics of 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.
	Subtotal	15 cr.
	Total	39 cr.

Special Requirements

The student 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 all 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

This 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: educable mental retardation, trainable mental retardation, behavior disorders, learning disabilities, handicapped adolescents, giftedness, and early childhood 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.

In requesting letters of recommendation, applicants should mention that confidentiality of the letters of recommendation will be maintained in accordance with the Family Educational Rights and Privacy Act of 1974.

Students electing this program must have the following courses or their equivalent as prerequisites: Educational Psychology or Psychology of Learning, Child or Adolescent Development, and (with the exception of students opting for the Gifted and Talented, and Educating Handicapped Adolescents sequences) Teaching of Reading or Language Arts.

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).
4. A valid State of Illinois or City of Chicago teaching certificate at the time of degree candidacy (exceptions: teaching certificate is not required for Early Childhood sequence; "Type 10" certification is required for degree candidacy in the Handicapped Adolescents 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 (EMH, TMH, LD, BD) must document 100 hours of clinical experience at the elementary and secondary levels in their area of exceptionality.

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.

Courses Required of All Students (except Early Childhood Sequence VI)

SPED-303	Measurement and Evaluation	3 cr.
SPED-304	Psychology of Exceptional Children	3 cr.

The master's project may be completed through

one of the following three credit hour courses with the approval of the

major advisor: 3 cr.

SPED-490	Research Seminar in Special Education	3 cr.
SPED-494	Research Seminar in Exceptionality	3 cr.
SPED-433	Seminar in Curriculum Development for Mentally Handicapped Children	3 cr.
SPED-454	Research Seminar for the Gifted	3 cr.
	Subtotal	9 cr.

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 Children with Learning Disabilities	3 cr.
SPED-411	Remediation and Planning for Children with Learning Disabilities	3 cr.
SPED-431	Teaching the Educable Mentally Handicapped Child	3 cr.
SPED-438	Practicum I: Teaching Educable Mentally Handicapped Children	3 cr.
SPED-439	Practicum II: Teaching Educable Mentally Handicapped Children	3 cr.
	and three electives	9 cr.
	Subtotal	27 cr.

NOTE: SPED-332 Reading for the Educable Mentally Handicapped Child, 3 cr., is a recommended elective.

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 Children with Learning Disabilities	3 cr.
SPED-441	Teaching Trainable Mentally Handicapped Children and Youth	3 cr.
SPED-448	Practicum I: Teaching Trainable Mentally Handicapped Children and Youth	3 cr.
SPED-449	Practicum II: Teaching Trainable Mentally Handicapped Children and Youth	3 cr.
	and four electives	12 cr.
	Subtotal	27 cr.

NOTE: SPED-332 Reading for the Educable Mentally Handicapped Child, SPED-333 Alternative Communication for Exceptional Individuals, or SPED-305 Principles of Speech Pathology for the Classroom Teacher, are recommended electives.

SEQUENCE III: Educating Children with Behavior Disorders

SPED-410	Identification and Diagnosis of Learning Disabilities	3 cr.
SPED-411	Remediation and Planning for Children with Learning Disabilities	3 cr.
SPED-420	Advanced Seminar: Characteristics of Children with Behavior Disorders	3 cr.
SPED-421	Advanced Strategies in Behavior Management	3 cr.
SPED-428	Practicum I: Educating Children with Behavior Disorders	3 cr.
SPED-429	Practicum II: Educating Children with	

Behavior Disorders.....	3 cr.
and three electives.....	9 cr.
Subtotal	27 cr.

SEQUENCE IV: Teaching Children with Learning Disabilities

SPED-410 Identification and Diagnosis of Children with Learning Disabilities.....	3 cr.
SPED-411 Remediation and Planning for Children with Learning Disabilities.....	3 cr.
SPED-412 Principles of Diagnostic Testing.....	3 cr.
SPED-413 Seminar in Learning Disabilities.....	3 cr.
SPED-418 Practicum I: Teaching Children with Learning Disabilities.....	3 cr.
SPED-419 Practicum II: Teaching Children with Learning Disabilities.....	3 cr.
and three approved electives.....	9 cr.
Subtotal	27 cr.

NOTE: SPED-305 Speech Pathology for the Classroom Teacher, or SPED-302 Psychology of Language and Cognitive Development, and a course in techniques of remediating reading difficulties (graduate level) are recommended electives for teachers interested in teaching in the Chicago Public Schools.

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-454 Research Seminar for the Gifted.....	3 cr.
SPED-459 Field Demonstration in Gifted Education.....	3 cr.
and three electives which should be selected from one of the following areas.....	9 cr.
Counseling	
Instructional Media	
Computers	
Administration and Supervision	
Academic Content (to be selected in consultation with advisor)	
Subtotal	27 cr.

SEQUENCE VI: Early Childhood Special Education

SPED-304 Psychology of Exceptional Children.....	3 cr.
SPED-302 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-488 Practicum in Early Childhood Special Education.....	3 cr.
SPED-490 Research Seminar in Special Education or ECED-412 Research Seminar in Early	

Childhood Education.....	3 cr.
Five electives (must be selected in consultation with advisor).....	15 cr.
Total	36 cr.

Comprehensive Examination: All students must successfully complete a comprehensive examination.

SEQUENCE VII: Educating Handicapped Adolescents

COUN-467 Vocational Theory and Occupational Information.....	3 cr.
SPED-410 Identification and Diagnosis of Learning Disabilities.....	3 cr.
SPED-405 Educational Planning for Handicapped Adolescents.....	3 cr.
SPED-403 Assessment of the Handicapped Adolescent.....	3 cr.
SPED-400 Vocational/Career Planning for the Handicapped Adolescent.....	3 cr.
SPED-408 Practicum in Educating Handicapped Adolescents.....	3 cr.
Three electives.....	9 cr.
Subtotal	27 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-300 Supervised Field Experience I, 3 cr. Clinical experience: observation and participation in classes for exceptional children; preschool through high school. Experiences in facilities for (a) emotionally disturbed children, (b) mentally handicapped children, and/or (c) children with learning disabilities, according to students' selected areas of concentration. Designed to meet State of Illinois requirements for clinical experience. **Prereq.:** consent of instructor. Undergraduate credit only.

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-302 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-303 Measurement and Evaluation, 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 solutions 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. **Prereq.:** SPED-303, SPED-304, and either SPED-310, or SPED-320 or SPED-330. Undergraduate credit only.

SPED-319 Practice Teaching of Children with 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.:** student teaching and 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. **Prereq.:** SPED-304. Undergraduate credit only.

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.:** student teaching and 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 problems 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. The educable mentally handicapped in school and society; their abilities and limitations; instructional objectives; adapting curriculum and materials to their needs; materials and methods of instruction; classroom management; 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 Alternative 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 with Educable Mentally Handicapped Children, 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.:** student teaching and 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 the Preschool Handicapped Child, 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 and a course in child psychology.

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 Handicapped Adolescents, 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 and SPED-320.

SPED-403 Assessment of the Handicapped Adolescent, 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 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-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 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 for Children with 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: Teaching Children with 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: Teaching Children with 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 Advanced Seminar on Characteristics of Children with 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-320.

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-428 Practicum I: Educating Children with 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: Educating Children with 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 the Educable Mentally Handicapped Child, 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, or consent of program advisor.

SPED-432 Special Instructional Problems of Educable Mentally Handicapped Children, 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 Mentally Handicapped Children, 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: Teaching Educable Mentally Handicapped Children, 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 required courses.

SPED-439 Practicum II: Teaching Educable Mentally Handicapped Children, 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 Trainable Mentally Handicapped Children and Youth, 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: Teaching Trainable Mentally Handicapped Children and Youth, 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: Teaching Trainable Mentally Handicapped Children and Youth, 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, problems in finding 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; findings from 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-304 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-454 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; original research projects will be encouraged. **Prereq:** graduate standing, SPED-450, and SPED-452.

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 clinic or school setting or in service center for the gifted. **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 the Physically Handicapped Child, 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 Young Handicapped Child 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; role of the special education teacher in working with other members of the multidisciplinary team and parents. Current issues. **Prereq:** graduate standing and SPED-304 or equivalent.

SPED-482 Assessment and Intervention with At-Risk and Handicapped Infants and Toddlers, 3 cr. Principles of assessment and intervention with the handicapped and at-risk infant and toddler (ages birth to 3). Theory and practice of intervention techniques. Transdisciplinary role of parent-infant education. Current research and issues. **Prereq:** graduate standing and SPED-304.

SPED-483 Working with Parents of Young Handicapped Children, 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 will be covered. **Prereq:** graduate standing and SPED-304.

SPED-488 Practicum in Early Childhood Special Education-Teaching Young Handicapped Children, 3 cr. Advanced supervised professional experience in educating young handicapped children 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 exceptionalty. Collaborative research under the supervision of a faculty advisor. **Pre-req.:** degree candidacy.

SPED-491 Thesis Credit in Special Education, 3 cr. Re-

tion. 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. Ex-

perimental method applied in a group research project in a specialized area of exceptionality. **Prereq.:** degree candidacy and consent of instructor.

CENTER FOR PROGRAM DEVELOPMENT

Reynold Feldman, Ph.D., Professor of English, Dean,
Program Development

Jose A. Acevedo, M.S., Coordinator of El Centro

Lucy Jayne Botscharow, Ph.D., Professor of Anthropology,
Coordinator, Kaskaskia Plan B.A. Degree Program

A. Alyce Claerbaut, M.A., Assistant Coordinator,
Office of Field and Continuing Education

Valli J. Furan, M.A., Assistant Director, Board of Governors B.A. Degree Program, and Women's Studies Faculty

Demetria Iazzetto, M.A., Assistant Coordinator, University Without Walls Program, and Women's Studies Faculty
Joan C. Macala, M.A., Coordinator, Office of Field and Continuing Education

Kay M. McClory, B.A., Program Associate,
Board of Governors B.A. Degree Program
Janet Sandoval, B.A., Program Associate,
Board of Governors B.A. Degree Program

Bettye J. Parker Smith, Ph.D., Associate Professor of English,
Director, Board of Governors B.A. Degree Program,
and Women's Studies Faculty

Bette S. Tallen, Ph.D., Associate Professor of Political Science, Coordinator, Women's Studies Program, and Women's Studies Faculty

Emily Wadsworth, Ph.D., Coordinator, Program for Interdisciplinary Education and Professional Development, and Women's Studies Faculty

Ulestine Watson, M.S., Coordinator,
University Without Walls Program

The Center for Program Development (CPD) fosters and coordinates innovative, experimental programs at Northeastern. Approved by the Board of Governors of State Colleges and Universities and the Illinois Board of Higher Education in 1970, the three-fold purpose of CPD is (1) to stimulate and develop new undergraduate curricular programs; (2) to develop worthwhile educational programs during an experimental period of up to three years; and (3) to house ongoing programs best situated within CPD.

Alternative Baccalaureate Degree Programs

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.

Kaskaskia Plan (Student-Designed Degree)

The Kaskaskia Plan is a non-traditional bachelor's degree program for students preparing for careers that require a multi-disciplinary approach. A Kaskaskia Plan 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 75 credit hours. Contact the Kaskaskia coordinator at extension 5079 or 3261 for further information.

University Without Walls

The University Without Walls Program (UWW) at Northeastern Illinois University is a self-paced, non-traditional, interdisciplinary baccalaureate degree program that offers a wide variety of learning opportunities to motivated and mature 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.

Interdisciplinary and Thematic Programs

Program for Interdisciplinary Education and Professional Development

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.

Professional Development (PD) seeks to foster faculty and professional staff vitality through a variety of activities which address their career, research, instructional and personal needs. The Kellogg Fellows Program, which provides released time for tenured faculty to pursue innovative program-development projects, and the Professional Development Fellows Program, which provides faculty and/or staff released time to design and/or implement professional-development projects for Northeastern faculty and/or professional staff, are administered by Professional Development.

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 became part of the Center for Program Development in January 1973. An official interdisciplinary Women's Studies Minor (described below) was approved in 1977. 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. The Graduate College offers a Master of Arts degree in Social Science that allows for concentrations in various areas, including women's studies.

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 winter. 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-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-379G Women in Medieval Society

HIST-379I Women in Film

HIST-379X Growing Up in America

HIST-383 Women in American History

HIST-390A Pro-Seminar in American History: Women Intellectuals

HIST-398 Women in Popular Culture

HIST-464A Readings in 20th-Century American History:

American Women

HIST-473A Seminar in U.S. History in the 20th-Century:

American Women

HIST-480G Graduate Readings in History: U.S. Women

Intellectuals

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-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

Program for Interdisciplinary Education

PIE-SEM-282A Assertiveness Training for Women, 2 cr.

The purpose of this course is to assist women in finding effective alternatives for the solution of many familiar problems. It is designed to teach women how to handle themselves and their situations in an assertive manner.

PIE-SEM-283G Puerto Rican Women, 3 cr. Class discussion will focus on the role of women in Taino society, Spanish society, African society; contrasting the participation of women in daily life in each of these societies.

PIE-SEM-283R Social and Economic Issues Confronting Latina Women, 3 cr. Women in Latin America have a both common and diverse history. This course will attempt to address our common histories from pre-colonial times to the present and confront issues that affect our daily lives. Among the topics to be discussed will be: culture and identity, immigration and migration, triple oppression, involvement of women in political revolutionary struggle.

PIE-SEM-283S Women Returning to School: Strategies for Success, 3 cr. The major objective of the course is to assist mature women to make the transition back to school a rewarding and growing experience. In the supportive atmosphere of other women returning to college, we will examine such topics as: renewing study skills, setting goals, managing time effectively, learning how to learn, negotiating the university bureaucracy, practicing assertive behavior, and how to deal with changing relationships in the family and classroom.

Psychology

PSYC-304B Women and Mental Health

PSYC-315 Psychological Development in Women

PSYC-320 Psychosexual Development

Sociology

SOC-214 Sociology of Marriage and the Family

SOC-306 American Women: The Changing Image

SOC-318 Socialization Processes

SOC-329 Sociology of Violence

SOC-340 Sociology of Sexuality

SOC-347 Sociology of Communication

SOC-357L Proseminar: Sociological Portrait of the Black Woman
SOC-357V Proseminar: Women and Theory
SOC-357W Proseminar: Topics in Sex and Gender: Issues in Reproduction
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

Women's Studies Program

WSP-101 Introduction to Women's Studies, 3 cr. This course will introduce students to the philosophy of Women's Studies, to members of the Women's Studies faculty and the courses they teach, and to key issues affecting women's lives; 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-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 will include women and health, pornography and theory. 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.

The Women's Studies Core Faculty

Luz Del Alba Acevedo, M.A., Women's Studies Faculty
Debra Bruce, M.F.A., M.A., Assistant Professor, English and Women's Studies
Ellen Cannon, Ph.D., Associate Professor, Political Science and Women's Studies
Shirley Castelnuevo, 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., Assistant Director, BOG/BA Degree Program and Women's Studies Faculty
Renny Golden, D.Min., Assistant Professor, Criminal Justice and Women's Studies
Nancy Green, Ph.D., Associate 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, M.A., 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
Vera Milam, M.A., Associate Professor, Sociology and Women's Studies
Dorothe Rigby-Weinberg, Ph.D., Associate Professor, Psychology and Women's Studies
Mary Ann Schwartz, Ph.D., Professor, Sociology and Women's Studies
BarBara M. Scott, M.A., Instructor, Sociology and Women's Studies
Valerie Simms, Ph.D., Associate Professor, Political Science and Women's Studies
Betty Parker Smith, Ph.D., Associate Professor, English, Director, Board of Governors B.A. Degree Program, and Women's Studies Faculty
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
Bette S. Tallen, Ph.D., Associate Professor, Political Science, Coordinator, Women's Studies Program, 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

Outreach Programs

El Centro de Recursos Educativos/Educational Resource Center

El Centro de Recursos Educativos/Educational Resource Center, located at 2524 West Altgeld, Chicago, is the university's outreach center for the Hispanic-American community. Known as El Centro, this field center strives to educate 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. It serves as a link between the university community and the people in the *barrio*. Specifically, El Centro orients community residents to higher education, provides university resources, improves the quality of life and increases employment opportunities through skills development.

During each academic year, El Centro offers four-course sequences in the evening (courses include natural sciences, behavioral and social sciences, humanities and electives) to fulfill the university's General Education Program requirements as well as to develop students' competence in languages and academic skills.

The four-course 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 winter trimesters, and to

take six credit hours each during the spring and 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. These are offered in response to identified educational needs of the community. Another service provided at El Centro's facilities is the offering of graduate courses in the area of supervision and administration through the Bilingual Teacher Training Program of Chicago State University.

El Centro's main mission is to serve the non-traditional college student population of returning adults. The sequence of courses is offered during the evening hours. Admission, registration, academic advisement and other student services are provided on site.

Additional university courses and non-credit offerings will continue to be developed. For more information, contact El Centro office, 2524 West Altgeld, Chicago, Illinois 60647. Telephone (312) 384-1766 after 1:00 p.m. Monday through Thursday or 583-4050, extension 3261, before 1:00 p.m. or on Fridays.

Office of Field and Continuing Education

The Office of Field and Continuing Education was established in June 1980, with the merger of two offices: the Extension and Continuing Education Office and the Field Experience Resource Center. The office currently houses the following programs:

Field Experience Resource Center

The Field Experience Resource Center (F.E.R.C.) functions as a clearinghouse for information related to sponsored experiential

learning (real-world 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.

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.

Non-Credit Program

The Non-Credit Program offers a wide variety of courses, workshops and events each trimester. Participants meet on campus and at other nearby locations evenings or on Saturday mornings. A separate brochure lists the many courses and activities.

For further information on any of the above programs, contact the Office of Field and Continuing Education, located in C-329, or call 583-4050, extension 3231.

FACULTY

ABELL, BERTRAM I., M.S., Illinois Institute of Technology, Professor, Curriculum and Instruction, Coordinator of Student Teaching

ACEVEDO, JOSE A., M.S., Boston University, Coordinator, El Centro de Recursos Educativos

ADDISON, KENNETH, Ph.D., University of Wisconsin (Madison), Associate Professor, Educational Foundations

AFIFI, RASOUL, Ph.D., North Texas State University, Assistant Professor, Management

AKBARI, HAMID, M.B.A., University of Toledo, Assistant Professor, Management

ALEXANDER, MARTHA, Ph.D., Kansas State University, Assistant to the Vice President for Administrative Affairs

ALTHAGE, CELIA, M.L.S., Western Michigan University, Assistant Professor, Library

ALVAREZ, ROSA, B.A., Northeastern Illinois University, Program Associate, Women's Services

AMBARDAR, ANITA KAK, Ph.D., Purdue University, Professor, Reading

ANDERSON, C. ALLEN, D.M.A., University of Illinois (Urbana), Professor, Music

ANDERSON, PEGGYE, Ph.D., Northwestern University, Associate Professor, Psychology

ANSARI, ABDUS S., Ph.D., Illinois Institute of Technology, Associate Professor, Mathematics

ARMSTRONG, PATRICIA, M.B.A., University of Chicago, Assistant Professor, Marketing

ARONOV, BERNARD M., Ph.D., University of Florida, Professor, Psychology

ARTAJELO, LUCRETIA, M.A., Cornell University, Assistant Professor, Foreign Languages and Literatures

BACHRACH, JOSEPH, Ph.D., Purdue University, Professor, Chemistry

BADILLO, MYRTA, B.A., Northeastern Illinois University, Program Associate, Special Programs

BAILEY, DONN F., Ph.D., Pennsylvania State University, Professor, Inner City Studies Education, Director of the Center for Inner City Studies

BAKER, BRADLEY, M.A., University of Chicago, Assistant Professor, Library, Associate University Librarian for Administrative Services

BALES, BARBARA, M.A., University of Northern Colorado, Assistant Professor, Student Services

BARBER, CHARLES M., Ph.D., University of Wisconsin (Madison), Associate Professor, History

BARNES, WILLIAM S., Ph.D., Georgia Institute of Technology, Professor, Information Science

BARNES, WILLIAM T., Ph.D., Tulane University, Professor, Biology

BARRETT, HARVEY B., Ed.D., Virginia Polytechnic Institute and State University, Assistant Professor, Curriculum and Instruction

BARUSHOK, JAMES, Ph.D., Michigan State University, Professor, Speech and Performing Arts

BATES, ALLAN, Ph.D., University of Chicago, Professor, English

BAXTER, JEANNE, Ph.D., Northwestern University, Assistant Professor, Educational Foundations

BECKER, LOUIS, Ph.D., Illinois Institute of Technology, Professor, Information Science

BEER, JEFF, B.S., University of Illinois (Urbana), Supervisor of Computing Facilities

BEHRENDT, BARBARA, M.A., University of Chicago, Assistant Professor, Student Services

BELICA, MICHAEL J., Ed.D., Indiana University, Professor, Curriculum and Instruction

BELL, MARY ANNE, Ed.D., Loyola University (Chicago), Professor, Special Education

BERCIK, JANET T., Ed.D., Northern Illinois University, Assistant Professor, Curriculum and Instruction

BERGAN, DANIEL J., Ph.D., Texas Tech University, Assistant Professor, Economics

BERLINGER, HAROLD E., D.F.A., Chicago Musical College, Professor, Music

BERNSTEIN, DOROTHY, Ph.D., Northwestern University, Associate Professor, Special Education

BERRIDGE, WAYNE, Ed.D., Indiana University, Professor, Reading

BETANCES, SAMUEL, Ed.D., Harvard University, Professor, Sociology

BETZ, ROBERT F., Ph.D., Illinois Institute of Technology, Professor, Biology

BEVERLY, SHERMAN, JR., Ph.D., Northwestern University, Professor, Curriculum and Instruction

BEVINGTON, GARY L., Ph.D., University of Massachusetts, Professor, Linguistics

BICHSEL, DONN H., B.A., Wittenberg University, Vice-President for Development and Public Affairs

BISS, KENNETH, Ph.D., University of Illinois (Urbana), Associate Professor, Information Science

BLACK, SOPHIE K., M.S., Columbia University, Professor, Library, Associate University Librarian for Public and Personnel Services

BLOCK, LESLIE, M.P.A., University of Pittsburgh, Assistant Director of Development

BOCK, DANIEL R., Ed.D., Northwestern University, Professor, Educational Foundations

BOFMAN, THEODORA, Ph.D., University of Michigan, Assistant Professor, Linguistics

BOOKER, THERESA H., Ph.D., Northwestern University, Professor, Reading

BOTSCHAROW, L. JAYNE, Ph.D., University of Chicago, Professor, Anthropology

BOWCOTT, RANDOLPH, M.A., University of Wisconsin (Milwaukee), Assistant Professor, Criminal Justice

BOWERS, MARY W., Ph.D., University of Minnesota, Professor, Counselor Education

BRABEC, GEORGINE, M.A.L.S., Rosary College, Assistant Professor, Library

BRACKEN, THOMAS J., M.A., San Francisco State University, Assistant Professor, English

BRACY, WANDA, M.S.W., University of Illinois (Jane Addams College, Chicago), Associate Professor, Social Work

BRANTLEY, BETTY, M.M., Northwestern University, Instructor, Information Science

BRAUN, VERNON, Ed.D., Nova University, Assistant Professor, Educational Foundations, Coordinator of Foreign Student Services

BRAXTON, JOHN, M.A., Colgate University, Assistant Director of Institutional Studies and Planning

BREWER, RICHARD H., Ph.D., University of Chicago, Professor, Educational Foundations

BREWTON, AUDIE R., Ph.D., University of Utah, Assistant Professor, Economics

BRODSKY, GARY H., Ph.D., University of Nebraska, Associate Professor, English

BROGLY, EDWARD R., Ph.D., University of Iowa, Professor, Counselor Education

BROMMEL, BERNARD J., Ph.D., Indiana University, Professor, Speech and Performing Arts

BROWN, JEAN, M.S., Loyola University (Chicago), Director of Personnel

BROZO, WILLIAM G., Ph.D., University of South Carolina, Assistant Professor, Reading

BRUCE, DEBRA, M.F.A., University of Iowa, Assistant Professor, English and Women's Studies

BRUSCA, RITA, M.A., Northeastern Illinois University, Assistant Professor, Special Education

BULLIS, BRUCE R., Ph.D., Southern Illinois University (Carbonale), Director of Institutional Studies and Planning

BULUCOS, DONALD J., M.F.A., School of the Art Institute of Chicago, Professor, Art

BUNNELL, ROBERT A., Ph.D., University of Chicago, Director of Sponsored Programs

BURGER, MARY LOUISE, Ed.D., Northern Illinois University, Professor, Curriculum and Instruction

BUSSE, BONNIE, Ph.D., Ohio State University, Professor, Foreign Languages and Literatures

CAFTORI, NETIVA, M.S., University of Illinois (Chicago), Assistant Professor, Information Science

CANNON, ELLEN S., Ph.D., University of Massachusetts, Associate Professor, Political Science and Women's Studies

CARLSON, JEAN, Ph.D., Northwestern University, Professor, Educational Foundations

CARLSON, KATHLEEN, Ph.D., Loyola University (Chicago), Assistant Director of Institutional Studies and Planning

CARLSON, MIROSLAVA, M.S., Northwestern University, Assistant Professor, Information Science

CARRUTHERS, IVA, Ph.D., Northwestern University, Professor, Sociology

CARRUTHERS, JACOB H., Ph.D., University of Colorado, Professor, Inner City Studies Education

CASTELNUOVO, SHIRLEY, Ph.D., University of California (Los Angeles), Professor, Political Science and Women's Studies

CHACON, ROGER J., Ph.D., Harvard University, Associate Professor, Philosophy

CHEN, CHONG-TONG, Ph.D., University of Illinois (Urbana), Associate Professor, Accounting

CHUNG, SIMON L., Ph.D., Illinois Institute of Technology, Assistant Professor, Biology

CLAERBAUT, A. ALYCE, M.A., Northeastern Illinois University, Assistant Coordinator, Field & Continuing Education

CLARK, EARL J., Ph.D., Loyola University (Chicago), Professor, English

CLARKE, KINGSLEY, J.D., University of Iowa, Assistant Professor, Criminal Justice

COBEN, SHARON S., Ph.D., University of Pittsburgh, Assistant Professor, Special Education

COHEN, JUDY, Ph.D., Syracuse University, Associate Professor, Marketing

COLEMAN, BEN C., Ph.D., University of Chicago, Professor, Foreign Languages and Literatures

COLEMAN, NANNETTE, M.A., Northwestern University, Assistant Professor, Foreign Languages and Literatures

COLLUM, THOMAS E., M.A., Northwestern University, Assistant Professor, Economics

COMBS, RONALD T., D.M., Northwestern University, Professor, Music

CONDON, MARGARET E., Ph.D., Loyola University (Chicago), Professor, Psychology

COOK, BARBARA A., J.D., John Marshall Law School, Assistant Professor, Educational Foundations, Assistant to the Vice-President for Student Affairs

CORTES, JULIO, M.A., Governors State University, Counselor-Coordinator, Special Services

COWNIE, JOHN, Ph.D., University of Southern California, Professor, Economics, Provost

CRAFTON, LINDA, Ed.D., Indiana University, Associate Professor, Reading

CREELY, DANIEL P., Ed.S., Ball State University, Associate Professor, Health, Physical Education, Recreation, and Athletics

CURTIS, VERONICA A., Ph.D., University of Illinois (Chicago), Associate Professor, Chemistry

CUTTS, MERRIE, M.F.A., The School of the Art Institute of Chicago, Assistant Professor, Art and Women's Studies

CZARNECKI, ADAM, Ph.D., Illinois Institute of Technology, Associate Professor, Mathematics

DAYTON, BARRY H., Ph.D., University of Southern California, Professor, Mathematics

DELGADO, JAMES, B.A., Northeastern Illinois University, Program Associate, Special Programs

DENG, SHENG LIANG, M.B.A., Boston University, Assistant Professor, Marketing

DE VILLE, K. DALE, Ph.D., Northwestern University, Professor, English

DIEPSTRA, GEORGE R., Ph.D., University of Texas (Health Science Center at Dallas), Assistant Professor, Biology

DIMOPLON, GLORIA, Ph.D., Massachusetts Institute of Technology, Professor, Chemistry

DOBBS, FRANK W., Ph.D., Massachusetts Institute of Technology, Professor, Chemistry, Dean of the College of Arts and Sciences

DOEHLER, ROBERT W., Ph.D., University of Illinois (Urbana), Professor, Earth Science

DOLEZAL, HUBERT, Ph.D., Cornell University, Professor, Psychology

DORSEY, JOHNNY, B.S., Northeastern Illinois University, Project Associate, Project Success

DUGINSKE, DENNIS, M.S., University of Wisconsin (Stout), Assistant Professor, Student Services

DUSTER, MURRELL, M.Ed., Loyola University (Chicago), Assistant Professor, Curriculum and Instruction, Coordinator of Advising and Testing

EASTON, ROBERT F., M.A., Northwestern University, Assistant Professor, Geography and Environmental Studies

EGAN, ROSEMARY W., Ph.D., St. Louis University, Professor, Special Education

ELLIS, GWENDOLYN, M.A., Chicago State University, Program Associate, Inner City Studies

ENGELHARDT, OLGA, Ph.D., Columbia University, Professor, Management, Dean of the College of Business and Management

ENGLER, HELEN J., M.M., Chicago Conservatory College, Assistant Professor, Music

ERBE, BRIGITTE, Ph.D., University of Iowa, Assistant Professor, Curriculum and Instruction

FALOONA, RONALD, M.P.E.H., University of Florida, Assistant Professor, Health, Physical Education, Recreation, and Athletics

FANSLOW, DON J., Ph.D., Indiana University, Professor, Biology

FAREED, AHMED, Ph.D., University of Chicago, Professor, Reading, Dean of the College of Education

FELDMAN, REYNOLD, Ph.D., Yale University, Professor, English, Dean of the Center for Program Development

FERRINI, BURT, B.A., Roosevelt University, Coordinator of University Events

FIELDS, BETTY, M.P.E.H., University of Florida, Assistant Professor, Health, Physical Education, Recreation, and Athletics

FILUS, LIDIA Z., Advanced Degree, University of Warsaw, Assistant Professor, Mathematics

FINKLE, KENNETH, J.D., C.P.A., John Marshall Law School, Associate Professor, Business Law

FISCHER, BRUCE, M.B.A., University of Chicago, Assistant Professor, Management

FLEMING, LIBBY KOMAIKO, B.A., Northeastern Illinois University, Instructor, Music

FLENER, FREDERICK O., Ph.D., University of Illinois (Urbana), Professor, Curriculum and Instruction

FORSLEV, ALBERT W., Ph.D., University of Chicago, Professor, Earth Science

FOWLER, MARY ANNE, Ed.D., Loyola University (Chicago), Professor, Curriculum and Instruction

FOXMAN, MICHAEL J., M.B.A., Youngstown State University, Internal Auditor

FRANKFORT, RICHARD, M.B.A., Northern Illinois University, Director of Business Services

FREIBERG, LEWIS, Ph.D., University of Kentucky, Associate Professor, Economics

FRIEDMAN, SERAFIMA, M.A., University of Chicago, Assistant Professor, Foreign Languages and Literatures

FRUEHLING, JAMES, Ph.D., Northwestern University, Professor, Counselor Education

FURAN, VALLI J., M.A., Northeastern Illinois University, Assistant Director, BOG/BA Degree Program, and Women's Studies Faculty

GABOURY, JOHN, Ed.D., University of Massachusetts, University Librarian and Director of Learning Services

GALASSI, BATTISTA J., Ph.D., University of Southern California, Associate Professor, Foreign Languages and Literatures

GALLAS, WALTER, M.S.Ed., Illinois State University, Assistant Director of Career Development and Placement

GANGWARE, EDGAR, Ph.D., Northwestern University, Professor, Music

GARTNER, CAROL B., Ph.D., New York University, Professor, English, Associate Dean of the College of Arts and Sciences

GEISLER, ELIEZER, Ph.D., Northwestern University, Professor, Management

GEISSAL, MARY ANN, M.A., Northeastern Illinois University, Assistant Professor, Linguistics

GEORGAKIS, CHRISTINE, M.S., De Paul University, Assistant Professor, Information Science

GEREN, DONALD F., M.B.A., C.P.A., De Paul University, Associate Professor, Accounting

GIBLIN, NAN E., Ph.D., Loyola University (Chicago), Assistant Professor, Counselor Education

GILBERT, ROBERT L., Ph.D., Illinois Institute of Technology, Professor, Physics

GILLIES, JEAN, Ph.D., Northwestern University, Professor, Art

GLICK, RONALD, D. Crim., University of California (Berkeley), Professor, Sociology

GLICKEN, IRWIN J., M.Ed., DePaul University, Assistant Professor, Student Services, Associate Director of Admissions and Records

GOKE, ORVILLE, M.S., University of Wisconsin (Madison), Associate Professor, Learning Services

GOLDBLATT, PHYLLIS K., Ph.D., University of Chicago, Professor, Educational Foundations

GOLDEN, RENNY, D.Min., Chicago Theological Seminary, Associate Professor, Criminal Justice and Women's Studies

GONZALES, RODRIGO, M.A., Indiana University, Assistant Professor, Foreign Languages and Literatures

GORAN, RUTH, M.S.A., C.P.A., Roosevelt University, Assistant Professor, Accounting

GORDON, ARNOLD W., M.S., Illinois Institute of Technology, Assistant Professor, Psychology

GORDON, ROOSEVELT, JR., M.A., Northeastern Illinois University, Assistant Professor, Student Services, Counselor-Coordinator, Project Success

GREEN, NANCY, Ph.D., Northwestern University, Professor, Educational Foundations and Women's Studies

GREENE, ETHEL J., Ed.D., University of Illinois (Urbana), Professor, Curriculum and Instruction

GREENSTEIN, DAVID S., Ph.D., University of Pennsylvania, Professor, Mathematics

GREGG, JOSEPH P., M.A., University of Chicago, Associate Professor, Library

GUNDRY, LISA K., M.Ed., Loyola University (Chicago), Assistant Professor, Management

GUYSER, MAURICE G., Ph.D., Northwestern University, Professor, Curriculum and Instruction

HABERAECKER, HEATHER, M.A., Sangamon State University, Director of Budgets

HALL, DENNIS M., Ph.D., University of Washington, Professor, Biology

HAMMOND, CARL, Ph.D., Indiana University, Professor, History

HAQUE, MOHAMMED, M.S., Northern Illinois University, Assistant Professor, Information Science

HARPER, JACQUELINE, M.A., Michigan State University, Director of Women's Services and Re-Entry Programs, and Women's Studies Faculty

HARRISON, S. LORENZO, Ph.D., Indiana University, Professor, History

HASKELL, JOHN F., Ed.D., Columbia University, Professor, Linguistics

HASELL, R. KIPP, Ed.D., Indiana University, Dean of Student Development

HASTINGS, SALLY A., Ph.D., University of Chicago, Associate Professor, History

HATTAWAY, ROBERT A., Ph.D., Pennsylvania State University, Assistant Professor, Biology

HAUSHALTER, WARREN, Ph.D., Northwestern University, Professor, Learning Services

HAWLEY, JANE S. Ph.D., Northwestern University, Professor, Counselor Education and Women's Studies

HEADLEY, BERNARD, Ph.D., Howard University, Associate Professor, Criminal Justice

HELFAND, DAVID, Ed.D., Loyola University (Chicago), Associate Professor, Student Services

HEMMER, GERALDINE, M.S., Northeastern Illinois University, Instructor, Mathematics

HESLER, RICHARD, M.A., University of Iowa, Professor, Speech and Performing Arts

HIGGINGBOTHAM, RICHARD, M.A., University of Illinois (Chicago), Associate Professor, Library

HIGHT, PHILIP, M.A.L.S., University of Chicago, Instructor, Library

HILBURGER, MARY JANE, M.S.L.S., University of Illinois (Urbana), Assistant Professor, Library

HILD, HAROLD, Ph.D., Loyola University (Chicago), Associate Professor, Speech and Performing Arts

HIRSCH, ROBERT, Ph.D., Southern Illinois University (Carbondale), Associate Professor, Speech and Performing Arts

HOAGLAND, SARAH, Ph.D., University of Cincinnati, Associate Professor, Philosophy and Women's Studies

HOBERG, THOMAS, Ph.D., University of Chicago, Associate Professor, English

HOEPEL, JOHN R., Ph.D., Loyola University, Associate Professor, Student Services

HOFFMAN, DONALD L., Ph.D., New York University, Professor, English

HOFER, H. DURWARD., Ph.D., Northwestern University, Professor, Management

HORNE, AARON, D.M.A., University of Iowa, Professor, Music

HOSTETLER, FRANK C., H.S.D., Indiana University, Professor, Health, Physical Education, Recreation, and Athletics

HOWARD, C. JERIEL, Ph.D., Texas Christian University, Professor, English

HOWARD, CHARLES, M.A., Central Michigan University, Assistant Professor, Curriculum and Instruction

HOWENSTINE, WILLIAM L., Ph.D., University of Michigan, Professor, Geography and Environmental Studies

HUDSON, RANDOLPH H., Ph.D., Stanford University, Professor, English

HUNT, EDMUND B., Ph.D., Ohio State University, Associate Professor, Special Education

HUNT, SANDRA, Ph.D., University of North Carolina, Assistant Professor, English

HURSH, BARBARA A., Ph.D., Northwestern University, Executive Assistant to the President and Assistant Provost

HURT, PHYLLIS, M.M., University of Illinois (Urbana), Assistant Professor, Music

HUSAIN, ASAD, Ph.D., University of Minnesota, Professor, Political Science

IAZZETTO, DEMETRIA, M.A., Goddard College, Assistant Coordinator, University Without Walls Program, and Women's Studies Faculty

IDE, KATHLEEN, B.S., Northeastern Illinois University, Program Associate, Mathematics

INBODY, NOAH M., Ed.D., Northern Illinois University, Professor, Counselor Education

ISAAC, MARGRETHE G., Ph.D., Northwestern University, Associate Professor, Curriculum and Instruction

JACKS, MAXINE, M.A., Northeastern Illinois University, Program Associate, Career Development and Placement

JACOBS, CLAIRE M., Ed.D., Northern Illinois University, Professor, Curriculum and Instruction

JAIN, NEMICHAND, M.B.A., Atlanta University, Associate Director of Business Services (Controller)

JAMES, KENNETH, Ph.D., Northwestern University, Associate Professor, Special Education

JEN, ALBERT C.Y., M.L.S., University of Michigan, Associate Professor, Library

JENNINGS, MARJORIE, M.A., Northeastern Illinois University, Educational Project Associate, Coordinator of Motorcycle Safety Program

JENSEN, ANNA-LISE, Ph.D., University of Illinois (Chicago), Assistant Professor, Mathematics

JOHNSON, VIOLET, M.Ed., Kent State University, Assistant Professor, Health, Physical Education, Recreation, and Athletics

JOLLY, JULIO, M.A., Roosevelt University, Assistant Professor, Foreign Languages and Literatures

JORDAN, DAVID G., Ph.D., Northwestern University, Associate Professor, Speech and Performing Arts

KAMINSKY, LEONARD, Ph.D., Southern Illinois University, Assistant Professor, Health, Physical Education, Recreation and Athletics

KANTER, MITCHELL, Ph.D., Ohio State University, Assistant Professor, Health, Physical Education, Recreation and Athletics

KARANJA, AYANA IMANI, Ph.D., Union for Experimenting Colleges and Universities, Associate Director, Inner City Studies, and Women's Studies Faculty

KASPER, RAYMOND T., M.S., University of Illinois (Urbana), Assistant Professor, Health, Physical Education, Recreation, and Athletics

KEEL, LINDA P., Ph.D., University of Michigan (Ann Arbor), Assistant Professor, Counselor Education

KELCHAUSER, JEAN A., B.A., Northeastern Illinois University, Assistant to the President

KERR, STANLEY, Ph.D., Yale University, Associate Professor, Philosophy

KIANG, YING-CHENG, Ph.D., Columbia University, Professor, Geography and Environmental Studies

KIELSON, DANIEL C., Ed.D., State University of New York at Albany, Vice-President for Student Affairs

KING, LINDA, M.L.S., University of Illinois (Urbana), Assistant Professor, Library

KINKLE, CHARAS, J.D., M.S.A., Roosevelt University, Assistant Professor, Accounting and Business Law

KIPP, MARK A., M.A., Northeastern Illinois University, Director of the Commuter Center

KIRCHHERR, WALTER, M.S., University of Illinois (Chicago), Assistant Professor, Information Science

KISTNER, GLEN, M.A.L.S., Rosary College, Associate Professor, Library

KLEIN, DORETTE, M.A., DePaul University, Assistant Professor, Foreign Languages and Literatures

KNEPLER, MYRNA C., Ph.D., Illinois Institute of Technology, Associate Professor, Linguistics

KNOX, CHARLES, J.D., DePaul University, Assistant Professor, Inner City Studies Education

KOKORIS, JAMES A., Ph.D., University of Michigan, Professor, Economics

KOO, JOO, Ph.D., Ohio State University, Associate Professor, Mathematics

KORKATSCH-GROSZKO, MARIA, Ph.D., Loyola University (Chicago), Associate Professor, Curriculum and Instruction

KOVAL, SYLVIE, M.M., Indiana University, Associate Professor, Music

KRIESEL, KARL M., Ph.D., University of Michigan, Professor, Geography and Environmental Studies

KRISSEK, THOMAS, M.B.A., C.P.A., Loyola University (Chicago), Assistant Professor, Accounting

KRUMP, JACQUELINE, Ph.D., Northwestern University, Professor, English

KUHL, MARILYN, B.F.A., The School of the Art Institute of Chicago, Program Associate, Financial Aid

KURTZ, ERNEST A., Ph.D., Illinois Institute of Technology, Professor, Psychology

KUZUHARA, DANIEL, M.A., University of Chicago, Assistant Professor, Psychology

LaBUDDE, C. DONALD, Ph.D., New York University, Professor, Information Science

LA HAM-SAEGER, JANET M., M.A., Northeastern Illinois University, Instructor, Health, Physical Education, Recreation and Athletics

LANDERHOLM, ELIZABETH, Ed.D., Northern Illinois University, Assistant Professor, Curriculum and Instruction

LAPAN, STEPHEN, Ph.D., University of Connecticut, Professor, Special Education

LATIMORE, GLORIA, Ph.D., Northwestern University, Professor, Inner City Studies Education

LEAFMAN, JOAN, M.S., City University of New York (Brooklyn), Assistant Professor, Health, Physical Education, Recreation, and Athletics

LEHMANN, WILMA H., Ph.D., University of Illinois (Urbana), Professor, Biology

LERNER, JANET, Ph.D., New York University, Professor, Special Education

LERNER, JULES M., Ph.D., Johns Hopkins University, Professor, Biology

LESMESS, GEORGE R., Ph.D., Ohio State University, Professor, Health, Physical Education, Recreation, and Athletics

LIEBOW, ELY M., M.A., University of Chicago, Associate Professor, English

LINDMAN, MARGARET, Ed.D., Loyola University (Chicago), Professor, Curriculum and Instruction

LOCKWOOD, JAMES R., Ph.D., University of Illinois (Urbana), Professor, Curriculum and Instruction

LOLLAR, SAM AARON, Ph.D., Texas A&M, Assistant Professor, Health, Physical Education, Recreation and Athletics

LOOS, FRANK M., Ph.D., University of London, Professor, Psychology

LOPEZ, SAMUEL, B.A., Northeastern Illinois University, Assistant Director of Financial Aid

LOWENTHAL, BARBARA, Ed.D., Northern Illinois University, Assistant Professor, Special Education

LUCAS, BONNIE, B.A., Northwestern University, Director, University Computer Services

LUCAS, JAMES A., D.M.A., University of Iowa, Professor, Music

LUTSCH, EDWARD F., Ph.D., Northwestern University, Professor, Biology

MACALA, JOAN, M.A., Loyola University (Chicago), Coordinator of Field and Continuing Education

MacDONALD, J. FREDERICK, Ph.D., University of California (Los Angeles), Professor, History

MacDONALD, JAMES I., M.A., University of Toronto, Assistant Professor, Anthropology

MACEY, WILLIAM, Ph.D., Loyola University (Chicago), Associate Professor, Management, Associate Dean of the College of Business and Management

MAGES, LIBBY ADLER, M.A., Northwestern University, Associate Professor, Speech and Performing Arts

MAHER, JOHN P., Ph.D., Indiana University, Professor, Linguistics

MALEK, VINCENT, Ph.D., Northwestern University, Professor, Music, Dean of the Graduate College

MANN, JOHN W., Ph.D., Columbia University, Professor, Psychology

MARBLEY, JANET GREEN, J.D., Capital University (Ohio), Associate Professor, Criminal Justice

MARCUS, SUSAN, M.S., Northwestern University, Instructor, Information Science

MASON, DONALD F., Ph.D., University of Wisconsin (Madison), Professor, Chemistry

MATHER, PATRICIA L., Ph.D., Purdue University, Assistant Professor, Curriculum and Instruction

MAXEY, ALVA, Ph.D., University of Saskatchewan, Professor, Sociology

McARDLE, EUGENE W., Ph.D., University of Illinois (Urbana), Professor, Biology

McCAMPBELL, JAMES, M.A., Western Reserve University, Program Associate, Human Resource Development

McCLARY, MICHAEL, M.M., Northwestern University, Assistant Professor, Music

McCLORY, KAY, B.A., Northeastern Illinois University, Program Associate, BOG/BA Program

McCORMACK, DALE L., M.S., Illinois State University, Educational Project Associate, Motorcycle Safety Program

McCOY, O. EVALYN, M.A., University of Chicago, Professor, Social Work

McFARLAND, ROBERT L., Ph.D., University of Chicago, Professor, Psychology

McGEE, JOHN, M.A., St. John's University (New York), Director of Alumni Affairs

McGREGOR, JAMES W., M.A., University of Chicago, Professor, Library, Associate Librarian for Technical and Financial Services

McGUICKIN, MARIE G., M.M., DePaul University, Assistant Professor, Music

McNEELY, SHARON, M.S., University of Wisconsin (Madison), Assistant Professor, Educational Foundations

MEDENWALD, ALICE, M.A., Chicago State University, Coordinator of Admissions and Records

MENDEZ, J. IGNACIO, Ph.D., University of California (Berkeley), Associate Professor, History

MESSERER, JEFFREY, Ph.D., Indiana University, Associate Professor, Special Education

MEYER, BETTY ANN, M.A., Northwestern University, Associate Professor, Health, Physical Education, Recreation, and Athletics

MILAM, VERA L., M.A., Northwestern University, Associate Professor, Sociology and Women's Studies

MILANESI, ALBERT, M.A., University of Chicago, Assistant Professor, Foreign Languages and Literatures

MILLARD, WILLIAM, Ph.D., University of Minnesota, Associate Professor, Geography and Environmental Studies

MISTARAS, EVANGELINE, M.A., University of Chicago, Associate Professor, Library

MITCHELL, DENNIS, M.F.A., Arizona State University, Associate Professor, Art

MITTMAN, NORMAN, M.S., Illinois Institute of Technology, Associate Professor, Mathematics

MOCH, BARBARA R., M.A., Northeastern Illinois University, Assistant Director of Sponsored Programs

MOCH, ERIC, Ed.D., Loyola University (Chicago), Assistant Professor, Foreign Languages and Literatures, Director of Admissions and Records

MOORHEAD, HUGH S., Ph.D., University of Chicago, Professor, Philosophy

MORALES, MARIA, M.A., Northwestern University, Professor, Learning Services

MORAN, NOREEN, M.Ed., De Paul University, Educational Project Associate, Outreach Coordinator, Chicago Teachers' Center

MORENO, MANUEL, Ph.D., University of Chicago, Assistant Professor, Anthropology

MORTON, JOSEPH C., Ph.D., University of Maryland, Professor, History

MOZZI, LUCILLE M., M.A., University of Chicago, Associate Professor, Reading

MURATA, ALICE, Ph.D., Northwestern University, Professor, Counselor Education

MURPHY, JOHN J., JR., M.A., University of Chicago, Professor, Political Science

MURRAY, HOWARD L., Ph.D., Loyola University (Chicago), Associate Professor, Chemistry

NAJERA, VALESKA J., Ph.D., Northwestern University, Assistant Professor, Foreign Languages and Literatures

NEAPOLITAN, RICHARD, Ph.D., Illinois Institute of Technology, Associate Professor, Information Science

NEMANIC, GERALD C., Ph.D., University of Arizona, Professor, English

NEQUIN, NOEL, M.D., Far Eastern University Medical School, Visiting Lecturer, Health, Physical Education, Recreation and Athletics

NEWMAN, STANLEY M., Ph.D., Union Graduate School, Professor, Anthropology

NISSIM-SABAT, CHARLES, Ph.D., Columbia University, Professor, Physics

NOERPER, NORMAN, M.B.A., University of Missouri (Kansas City), Assistant Professor, Information Science

O'LEARY, BRENDAN, Director of Physical Facilities

ODDO, VINCENT, Ph.D., Indiana University, Professor, Music

OLSON, JERRY BROOKS, Ph.D., University of Chicago, Professor, Educational Foundations, Educational Project Associate (Director of Chicago Teachers' Center)

ORNELAS, LAVERNE, M.F.A., University of Notre Dame, Professor, Art

OTTO, BEVERLY, Ph.D., Northwestern University, Assistant Professor, Curriculum and Instruction

PADEN, BETTY J., Ed.D., Loyola University (Chicago), Professor, Curriculum and Instruction

PAINE, ROBERT N., Ph.D., George Peabody College, Professor, English

PANTIGOSO, EDGARDO, Ph.D., University of Chicago, Professor, Foreign Languages and Literatures

PASTORS, CHARLES, Ph.D., University of Chicago, Professor, Political Science

PATRICELLI, ANTHONY A., M.S., DePaul University, Associate Professor, Mathematics

PATTON, DOROTHY R., M.A., University of Chicago, Associate Professor, English, Assistant Provost

PEDROSO, ANGELINA, LL.D., University of Havana, Associate Professor, Foreign Languages and Literatures

PEIRICK, ELYSE J., Ph.D., Northwestern University, Professor, Music

PELLEGRINI, VICTOR J., Ph.D., Northwestern University, Professor, Information Science

PELLER, JANE E., M.A., University of Chicago, Assistant Professor, Social Work

PENSO-BUFORD, BEATRIZ, M.A., University of Chicago, Counselor-Coordinator, Special Services

PERHAM, FAUSTINE, Ph.D., Northwestern University, Associate Professor, Mathematics

PETERSEN-SALAMEH, DIANE L., Ph.D., University of Illinois (Chicago), Associate Professor, Economics

PETTY, DOLORES L., M.A., Northwestern University, Associate Professor, Health, Physical Education, Recreation, and Athletics

PEYTON, GAIL ANN DAVIS, M.L.S., University of Wisconsin (Madison), Assistant Professor, Library

PIZZI, WILLIAM J., Ph.D., Illinois Institute of Technology, Professor, Psychology

POSKOZIM, PAUL S., Ph.D., Northwestern University, Professor, Chemistry

POWERS, BERNARD E., Ph.D., Northwestern University, Associate Professor, History

PRUESKE, ELEONOR, Ph.D., University of Illinois (Urbana), Professor, Health, Physical Education, Recreation, and Athletics

PRYOR, OTHELIA, M.B.A., University of Illinois (Urbana), Assistant Professor, Finance

PURI, SURENDER, Ph.D., Columbia University, Professor, Physics

QUTUB, MUSA Y., Ph.D., Iowa State University, Professor, Geography and Environmental Studies

RAMAN, VENKAT K., Ph.D., C.P.A., Purdue University, Associate Professor, Accounting

REDD, DURWARD A., M.A., University of Missouri (Kansas City), Professor, Speech and Performing Arts

REED, VIRGINIA, M.A., University of Chicago, Associate Professor, Library

REICHHARDT, RICHARD W., Ph.D., University of Texas, Professor, Mathematics

RENAS, STANLEY, D.B.A., C.P.M., Georgia State University, Professor, Marketing

REPICH, KATHLEEN E., M.Ed., Loyola University (Chicago), Assistant Professor, Student Services, Coordinator of Academic Program Services

REYNOLDS, AUDREY L., Ph.D., Northwestern University, Professor, Linguistics

REYNOLDS, LYNNE D., Ph.D., Northwestern University, Associate Professor, Special Education

RICHARDSON, JACK E., M.A., Columbia University, Assistant Professor, Linguistics

RICHEK, MARGARET, Ph.D., University of Chicago, Associate Professor, Reading

RIESS, STEVEN, Ph.D., University of Chicago, Professor, History

RIGBY, DOROTHE, Ph.D., University of Chicago, Associate Professor, Psychology and Women's Studies

RITZ, HELEN H., M.B.A., Indiana University, Associate Director of Business Services (Bursar)

RIVERA, MIRIAM, B.A., Northeastern Illinois University, Associate Director of Admissions and Records

RIVERA, SANTOS, M.A., Northeastern Illinois University, Counselor-Coordinator, Proyecto Pa'Lante

RIZIK, JAMES, Ph.D., Harvard University, Assistant Professor, Philosophy

ROBACZEWSKI, WAYNE, B.A., University of Illinois (Chicago), Athletic Trainer, Health, Physical Education, Recreation and Athletics

ROBERTSON, RICHARD J., Ph.D., University of Chicago, Professor, Psychology

ROBINSON, ALFRED, Ph.D., C.P.A., Wayne State University, Associate Professor, Accounting

ROBINSON, EDWARD A., Ph.D., Northwestern University, Professor, Curriculum and Instruction

RODRIGUEZ, OSCAR, M.A., Loyola University (Chicago), Assistant Professor, Foreign Languages and Literatures

ROLLER, RUSSELL, M.F.A., Southern Illinois University, Professor, Art

ROSENTHAL, VIN, Ph.D., Illinois Institute of Technology, Professor, Psychology

ROTH, RAYMOND, C.P.M., M.A., Roosevelt University, Associate Director of Business Services/Purchasing and Materials Management

ROTHSTEIN, SHELDON H., M.A., University of Chicago, Assistant Professor, Economics and Management

ROTMAN, SHEILA, M.A., Northeastern Illinois University, Assistant Director of University Relations

ROUSE, JOHN, M.S.W., West Virginia University, Assistant Professor, Social Work

RUSSELL, HENRY B., Ph.D., Northwestern University, Associate Professor, Foreign Languages and Literatures

RUSTAGI, RAKESH K., Ph.D., Ohio State University, Assistant Professor, Mathematics

SAGHAFI, BEHROOZ, Ph.D., State University of New York at Buffalo, Coordinator of Academic Computing

SAIET, RONALD A., Ed.D., Indiana University, Professor, Learning Services, Associate Director of Learning Services

SANDERS, LAURA, M.S., Kent State University, Assistant Professor, Earth Science

SANDOVAL, JANET, B.A., Northeastern Illinois University, Program Associate, BOG/BA Degree Program

SCHARF, ARTHUR A., Ph.D., Northwestern University, Professor, Biology

SCHEVERS, THOMAS J., Ph.D., Loyola University (Chicago), Associate Professor, Special Education

SCHILLER, VALERIE, B.A., Northeastern Illinois University, Program Associate, Counseling Office

SCHIMPF, ANTHONY, Ed.D., Western Colorado University, Associate Professor, Health, Physical Education, Recreation, and Athletics

SCHOMBURG, WILLIAM, Coordinator of Safety, Security, Parking and Maintenance Operations

SCHUEPFER, THERESE, Ph.D., Memphis State University, Assistant Professor, Psychology

SCHUTT, WILLIAM, M.M., Chicago Conservatory College, Associate Professor, Music

SCHWARTZ, MARY ANN, Ph.D., Northwestern University, Professor, Sociology and Women's Studies

SCHWARZ, SARA, M.S.L.S., University of Illinois (Urbana), Assistant Professor, Library

SCOTT, SHARON, M.L.S., University of Pittsburgh, Instructor, Library

SEGEDIN, LEOPOLD B., M.F.A., University of Illinois (Urbana), Professor, Art

SEIGEL, DON M., M.A., University of Illinois (Urbana), Associate Professor, Linguistics

SETZE, LEONARD, Ed.D., Loyola University (Chicago), Professor, Curriculum and Instruction

SHABICA, CHARLES, Ph.D., University of Chicago, Professor, Earth Science

SHAH, BIPIN, M.S., Florida Institute of Technology, Associate Professor, Finance

SHARIFF, ZAHID, D.P.A., New York University, Professor, Political Science

SHEAIN, PHYLLIS, M.S., College of St. Francis, Director of Health Services

SHEPHARD, ELLSWORTH R., M.A., University of Pennsylvania, Coordinator of Graduate Admissions

SHERVANIAN, CHRISTY C., Ph.D., University of Pittsburgh, Professor, Psychology

SHUB, ALLEN N. Ph. D., Loyola University (Chicago), Associate Professor, Management

SIARNY, VAUGHN, M.Ed., University of Illinois (Urbana), Assistant Director of Student Activities

SIMMS, MARY LOU, B.A., Northeastern Illinois University, Coordinator of Early Education Programs

SIMMS, VALERIE, Ph.D., Georgetown University, Professor, Political Science and Women's Studies

SINGLETON, GREGORY H., Ph.D., University of California (Los Angeles), Professor, History

SITHOLE, ELKIN, Ph.D., The Queens University of Belfast, Professor, Inner City Studies Education

SLADEK, MARTI, M.A., Ohio State University, Director of University Relations

SLOAN, THOMAS, Ph.D., Northwestern University, Associate Professor, Art

SMITH, BETTYE J. PARKER, Ph.D., Union Graduate School, Associate Professor, English, Director of BOG/BA Program, and Women's Studies Faculty

SMITH, MARGO L., Ph.D., Indiana University, Professor, Anthropology

SMITH, P. CRAIG, Ph.D., University of North Carolina (Chapel Hill), Professor, History

SMITH, PATRICIA A., Ph.D., Northwestern University, Professor, Biology

SMITH, WILLIAM E., Ph.D., Illinois Institute of Technology, Associate Professor, Inner City Studies Education

SOCHEN, JUNE, Ph.D., Northwestern University, Professor, History and Women's Studies

SOHRABIAN, AHMAD, Ph.D., University of California (Santa Barbara), Assistant Professor, Finance

SOLANO, FRANK J., B.S., University of Illinois (Chicago), Assistant Director of Financial Aid

SOOD, MOHAN K., Ph.D., University of Western Ontario, Professor, Earth Science

SPEAKE, CONSTANCE J., D.M.A., University of Oregon, Associate Professor, Music

SPELLER, WILLIAM, M.A., University of Chicago, Assistant Professor, Student Services, Director of Special Programs

SPENCER, NANCY A., M.A., University of Chicago, Assistant Professor, Anthropology

STARKS, ROBERT, M.A., Loyola University (Chicago), Associate Professor, Inner City Studies Education

STEARLEY, PATRICE, M.A.L.S., Rosary College, Instructor, Library

STEHRMAN, ROBERT M., Ph.D., University of Delaware, Professor, Physics

STEIGMAN, MARTIN, Ph.D., University of Texas, Professor, Special Education

STEINBERG, SALME HARJU, Ph.D., Johns Hopkins University, Professor, History

STEPHENS, RORY M., Ph.D., Northwestern University, Associate Professor, Linguistics

STERN, DANIEL, Ph.D., University of Wisconsin (Madison), Professor, Sociology

STETSON, KENNETH W., Ph.D., Loyola University (Chicago), Assistant Professor, History, Assistant Provost

STEVENS, KATHLEEN, Ph.D., University of Illinois (Urbana), Associate Professor, Reading

STEWART, WILLIAM, M.A., Northwestern University, Assistant Professor, Speech and Performing Arts

STOLTZE, HERBERT J., Ed.D., Columbia University, Professor, Biology

STOPPERT, MARY KAY, M.F.A., School of the Art Institute of Chicago, Professor, Art

STOYANOFF, KAREN, Ph.D., Northwestern University, Counselor-Coordinator, Skills and Testing

STUART, EDWARD F. Ph.D., University of Oklahoma, Assistant Professor, Economics

STYER, SANDRA, Ph.D., Michigan State University, Professor, Curriculum and Instruction and Women's Studies; Associate Dean of the College of Education

SVOBODA, WAYNE N., M.S., Iowa State University, Associate Professor, Chemistry

SWARM, CHRISTINE, Ed.D., Indiana University, Professor, Curriculum and Instruction

SWEIG, MITCHEL, Ph.D., University of Chicago, Professor, Physics

TALLEN, BETTE S., Ph.D., University of Michigan, Associate Professor, Political Science and Women's Studies; Coordinator of Women's Studies

THOMPSON, ANDERSON, Ph.D., Union Graduate School, Associate Professor, Inner City Studies Education

THOMPSON, GLEN, Ph.D., University of Minnesota, Professor, Special Education

THOMPSON, MARTHA E., Ph.D., University of Iowa, Professor, Sociology and Women's Studies

TINSLEY, JAMES R., Ph.D., University of Pennsylvania, Professor, English

TOMPKINS, C. DAVID, Ph.D., University of Michigan, Professor, History

TORRE, CARLOS A., Ed.D., Harvard University, Professor, Social Work

TORRES, MAXIMINO, Ed.D., Loyola University (Chicago), Associate Professor, Student Services, Teacher-Counselor, Proyecto Pa'Lante

ULIASSI, EDWARD C., Ph.D., Syracuse University, Professor, Sociology

UNUMB, DAVID F., M.A., Johns Hopkins University, Professor, Speech and Performing Arts

UPADHYAY, HANSA, Ph.D., Memorial University of Newfoundland, Professor, Earth Science

VAROPHAS, KUSOL, Ph.D., Johns Hopkins University, Professor, Political Science

VEGA, FLAVIO, Ph.D., University of Minnesota, Assistant to the President/Affirmative Action Officer

VERBILLION, JUNE B., Ed.D., Loyola University (Chicago), Professor, English

VILARO, ANNETTE BUURSTRA, M.A.L.S., Michigan State University, Associate Professor, Library

VILARO, RODOLFO, M.A., University of Illinois (Urbana), Assistant Professor, Curriculum and Instruction

VITTENSON, LILLIAN K., Ph.D., Northwestern University, Professor, Special Education

VOGEL, FRANCIS, Ph.D., Northwestern University, Professor, Counselor Education

VOGEL, MITCHELL, M.A., Roosevelt University, Associate Professor, Educational Foundations

VOKURKA, EDWARD J., M.A., Roosevelt University, Coordinator of Graduate Records

WADSWORTH, EMILY C., Ph.D., Northwestern University, Coordinator of Program for Interdisciplinary Education and Professional Development

WAECHTER, JOHN, P.E.D., Indiana University, Professor, Health, Physical Education, Recreation, and Athletics

WALKER, ROBERT J., Ph.D., Wayne State University, Professor, Speech and Performing Arts

WALKER, SUE SHERIDAN, Ph.D., University of Chicago, Professor, History

WALKOSZ, VIVIAN A., Ed.D., Northern Illinois University, Professor, Curriculum and Instruction

WALLIE, ALAN, M.F.A., Cranbrook Academy, Professor, Art

WALSH, PATRICIA, Ph.D., Indiana University, Associate Professor, Special Education

WALSH, WILLIAM, Ph.D., University of Wyoming, Professor, Counselor Education

WANG, SHU-SHIN, Ph.D., University of West Virginia, Assistant Professor, Political Science

WANG, SOPHIA HSU, M.S., University of New Haven, Assistant Coordinator of Computing Facilities

WATSON, ULESTINE, M.S.Ed., Eastern Illinois University, Coordinator of the University Without Walls Program

WEDAM, CHRISTINE, M.S.Ed., Chicago State University, Educational Project Associate, Coordinator of the Chicago Teachers' Center

WEINER, LOUIS M., Ph.D., University of Chicago, Professor, Mathematics

WEINTRAUB, JANE, M.F.A., University of Wisconsin (Madison), Associate Professor, Art

WEISS, HARVEY, M.B.A., Southern Illinois University (Edwardsville), Assistant Professor, Finance

WENDELL, RONALD, M.A., University of Iowa, Assistant Professor, Student Services, Director of Career Development and Placement

WENZLAFF, RICHARD D., D.F.A., Chicago Musical College, Professor, Music

WEST, GEORGE, B.A., Northeastern Illinois University, Director of Financial Aid

WEST, RONALD, B.A., University of Illinois (Chicago), Program Associate, Inner City Studies

WHITAKER, ANNCELYNE, M.A., University of Chicago, Associate Professor, Inner City Studies Education

WHITE, HARRY S., Ph.D., Northwestern University, Professor, English

WHITEHEAD, MARYLENE, B.A., Northeastern Illinois University, Program Associate, Project Success

WIEDEMANN, FRIEDRIKE, Ph.D., Northwestern University, Professor, Foreign Languages and Literatures; Associate Dean of the College of Arts and Sciences

WILLERMAN, MARVIN, Ed.D., University of Illinois (Urbana), Professor, Educational Foundations

WILLIAMS, ALFREDA, M.A., University of Chicago, Educational Project Associate, Special Services

WILLIAMS, ORRIN, B.A., Northeastern Illinois University, Program Associate, Health, Physical Education, Recreation and Athletics

WILLIAMS, WALTER, J.D., University of Illinois (Urbana), Director of Student Activities

WILLIAMSON, EUCLID, M.A., Roosevelt University, Director of Development

WINSTON, BARBARA, Ph.D., Northwestern University, Professor, Geography and Environmental Studies

WISZOWATY, ANTHONY G., M.A., Northwestern University, Assistant Director of Development

WORRILL, CONRAD, Ph.D., University of Wisconsin (Madison), Professor, Inner City Studies Education

WOZNIAK, RICHARD, M.S., Northern Illinois University, Assistant Professor, Marketing

ZIMELIS, VICTORIA, M.A., DePaul University, Assistant Professor, Accounting

PROFESSORS EMERITI

AUSTRHEIM, BERNIECE, M.A., University of Chicago, Associate Professor, Elementary Education

BARNETT, VIRGINIA J., M.M., Roosevelt University, Assistant Professor, Music

BEAVER, JOSEPH S., Ph.D., New York University, Professor, Linguistics

BOUKIDIS, NICHOLAS, M.S., Harvard University, Associate Professor, Mathematics

BRITAN, NORMAN, M.A., University of Chicago, Associate Professor, Anthropology

CHRISTENSEN, LOUISE E., M.A., Northwestern University, Associate Professor, Physical Education

CLARKSON, MILLER B., M.S., Texas A&M University, Associate Professor, Physics

CREAN, JOSEPH G., Ph.D., University of Chicago, Professor, Biology

CROPPER, BARBARA, M.A., University of Chicago, Associate Professor, Anthropology

DIERICKX, C. WALLACE, Ph.D., Northwestern University, Professor, Geography and Environmental Studies

ELLISON, EMILY W., M.A., Wellesley College, Instructor, Linguistics

ETTEN, JOHN, Ed.D., Loyola University (Chicago), Professor, Elementary Education

FAIRES, DENA M., Ph.D., Northwestern University, Professor, Speech and Performing Arts

FREDERICK, DUKE, Ph.D., University of Chicago, Professor, History

FREDERICK, EDRIS, Ph.D., Northwestern University, Professor, Political Science

FRITZMANN, FRANK J., M.F.A., University of Iowa, Associate Professor, Art

GALLAGHER, VALERIE Z., M.Ed., Chicago Teachers College, Assistant Professor, Biology

GEORGIU, PERI P., Ed.D., Nova University, Professor, Early Childhood Education

GLOCKNER, VALENTINE, M.A., Teachers College, Columbia University, Associate Professor, Educational Foundations

GOLDBERG, ROBERT J., Ph.D., Illinois Institute of Technology, Professor, Biology

HAAS, RAOUL R., M.A., Northwestern University, Associate Professor of Education

HALLBERG, CLARICE, M.A., Northwestern University, Professor, Art

HARMON, HAROLD D., Ph.D., University of Iowa, Professor, Music

HILFMAN, TILLIE, M.A., Northeastern Illinois University, Assistant Professor, Early Childhood Education

JACOBSON, ANITA, M.Ed., National College of Education, Assistant Professor, Special Education

KIRK, R. BRUCE, Ph.D., Purdue University, Professor, Psychology

KRUEGER, MARCELLA, M.A., Columbia University, Associate Professor, Early Childhood Education

LAMP, HERBERT F., Ph.D., University of Chicago, Professor, Biology

LANGLEY, ELIZABETH, Ph.D., Loyola University (Chicago), Professor, Counselor Education

LAWSON, COURTNEY B., M.A., University of Chicago, Associate Professor, English

LAZOW, ALFRED, Ed.D., Boston University, Professor, Elementary Education

LEASE, BENJAMIN, Ph.D., University of Chicago, Professor, English

LEVIN, MARIAN, M.Ed., Loyola University (Chicago), Assistant Professor, Library

McCREERY, DOROTHY, M.A., Northwestern University, Assistant Professor, Student Services

MEYERS, GERTRUDE S., M.A., University of Denver, Associate Professor, Special Education

MORAN, CHARLES W., Ph.D., University of Illinois, Professor, Mathematics

NICOSIA, DOLORES J., Ph.D., Northwestern University, Professor, Music

OTTE, MAXINE, M.A.L.S., Rosary College, Assistant Professor,
Library

SACHS, JEROME M., Ph.D., University of Chicago, Professor
Mathematics, President Emeritus

SAMCHYSHYN, MIROSLAV, M.A., Lvov University, Associate
Professor, Foreign Languages and Literatures

STEVENS, HUMPHREY, Ed.D., State University of New York
(Buffalo), Professor, Elementary Education

TEMKIN, DAVID, M.A., University of Chicago, Professor,
Psychology

VOLLMAR, NAOMI, M.A., Michigan State University, Assistant Professor, Mathematics

WIERCINSKI, FLOYD J., Ph.D., University of Pennsylvania, Professor, Biology

YOCHIM, MAURICE, M.A.E., Art Institute of Chicago, Associate
Professor, Art

ZIMMERMAN, BERNIECE, M.A., Northwestern University, Associate Professor of Education

September 7, 1992er begins

Term begins

ACADEMIC CALENDAR

FALL TRIMESTER 1987

September 7	Monday	Labor Day holiday
September 8	Tuesday	Fall trimester begins On-campus registration
September 9	Wednesday	On-campus registration
September 10	Thursday	Classes begin
November 26	Thursday	Thanksgiving holidays
November 27	Friday	
November 28	Saturday	
December 22	Tuesday	Fall trimester ends
December 23 - January 3		Winter recess

WINTER TRIMESTER 1988

January 4	Monday	Winter trimester begins On-campus registration
January 5	Tuesday	On-campus registration
January 6	Wednesday	Classes begin
January 18	Monday	Martin Luther King, Jr.'s Birthday holiday
February 12	Friday	Lincoln's Birthday holiday
April 19	Tuesday	Winter trimester ends
April 20 - May 1		Spring recess

SPRING/SUMMER TERMS 1988

May 2	Monday	Spring term begins On-campus registration
May 3	Tuesday	Classes begin
May 30	Monday	Memorial Day holiday
June 24	Friday	Spring term ends
June 27	Monday	Summer term begins On-campus registration
June 28	Tuesday	Summer term classes begin
July 4	Monday	Independence Day holiday
August 22	Monday	Summer term ends
August 23 - September 5		Summer recess

INDEX

Academic Affairs	2
Academic Calendar	211
Academic Regulations	20
Accounting.....	129
Administrative Affairs.....	2
Admission to the College of Education	140
Admission to the Graduate College	27
Admission to Major Programs	11
Admission to the University	6
Anthropology	32
Art	34
Asian Studies	38
Bilingual/Bicultural Education.....	144
Biology	38
Board of Governors Bachelor of Arts Degree	195
Board of Governors of State Colleges and Universities	i
Business Law	129
Career Development and Placement	2
Center for Inner City Studies	174
Center for Program Development.....	195
Center for Student Development.....	2
Chemistry	45
Chicago Teachers' Center	142
Child Care Center	3
Clinical Experiences and Student Teaching	142
College of Arts and Sciences.....	31
College of Business and Management	127
College of Education.....	139
Community and Family Counseling.....	146
Community Listeners.....	199
Communter Center	3
Counseling Office	3
Counselor Education.....	144
Course Load	20
Course Numbers	5
Criminal Justice	49
Curriculum and Instruction	148
Dance Minor	94
Development and Public Affairs	2
Driver Education Minor	165
Dropping Classes	23
Early Childhood Education.....	149
Early Childhood Special Education.....	190
Earth Science	50
Economics	54
Educational Administration and Supervision	156
Educational Foundations	155
Educational Psychology Minor	155
Educational Studies Minor.....	155

El Centro (Educational Resource Center)	198
Elementary Education.....	160
English	56
English Language Program	62
Environmental Studies	67
Exercise Physiology and Cardiac Rehabilitation	166
Faculty	200
Fees	13
Field and Continuing Education.....	199
Finance.....	129
Financial Aid.....	13
Foreign Languages and Literatures	63
French	63
General Business Administration.....	132
General Education Program	18
Geography and Environmental Studies.....	67
German.....	64
Gerontology Minor	111
Grading System	21
Graduate College.....	27
Graduation	24
Greek Studies	72
Guidance and Counseling	144
Health Education Minor	165
Health, Physical Education, Recreation and Athletics.....	163
Health Service	4
History	72
History of the University.....	1
Honors and High Honors.....	23
Honors Program	20
Hospital Play Education Minor	150
Human Performance Laboratory.....	167
Human Resource Development.....	172
Information Science.....	77
Inner City Careers Minor	175
Inner City Studies Education.....	174
Instructional Media.....	177
Intercollegiate Athletics	26
International Business Minor	134
International Student Services	3
International/Intercultural Studies.....	80
Intramurals and Recreation.....	26
Italian	64
Judaic Studies	81
Kaskaskia Plan.....	196
Language Arts	179
Learning Services	25
Leisure Studies	165
Library	25
Linguistics.....	84

Literature58
Management133
Marketing136
Master's Degree Programs.....29
Mathematics87
Medical Technology40
Mexican/Caribbean Studies Minor.....175
Multi-Cultural Education Minor155
Music91
Natural Science100
Non-Credit Program199
Officers of the University i
Pass/Fail Option 22
Philosophy100
Physical Education164
Physics101
Political Science.....105
Preschool Education Minor.....150
Program for Interdisciplinary Education
and Professional Development.....196
Project Success4
Proyecto Pa'Lante.....4
Psychology.....110
Public Administration Minor105
Reading180
Registration and Records23
Release of Information Pertaining to Students.....16

Residency Status11
ROTC10
Russian.....64
Secondary Education.....183
Social Science115
Social Work.....117
Sociology.....119
Spanish63
Special Education.....187
Special Programs4
Special Services.....4
Speech and Performing Arts.....121
Student Activities4, 26
Student Affairs2
Student Classification5
Student Employment Office3
Student Teaching.....142
Teaching English as a Second Language.....85
Transcripts23
University, The1
University Events.....4
University Without Walls196
Urban Land Use Planning.....68
Veterans' Affairs.....3
Vocational Counseling145
Women's Services5
Women's Studies Program196

NOTES