Notices

Through the university governance and administrative processes, after publication of this catalog changes may occur in the academic calendar, admission and graduation requirements, academic programs, course offerings, regulations, staff, and tuition and fee charges. Such changes take precedence over catalog statements. While reasonable effort will be made to publicize such changes, a student is encouraged to seek current information from appropriate offices, because responsibility for complying with all applicable requirements ultimately rests with the student.

Although the university attempts to accommodate the course requests of students, course offerings may be limited by financial, space, and staffing considerations or may otherwise be unavailable. Nothing in this catalog may be construed to promise or guarantee registration in any course or course of study (whether required or elective) nor may anything be construed to promise or guarantee the completion of an academic program within a specified length of time.

Other statements of a legal nature are printed in the "Legal Notices" section of this catalog. Academic policies and programs described in this catalog are in effect as of the beginning of the fall semester unless an exception is indicated.

Student Responsibility

It is the responsibility of students to know and observe all regulations and procedures relating to the program they are pursuing. In no case will a regulation be waived or an exception granted because students plead ignorance of, or contend that they were not informed of, the regulations or procedures. Questions on regulations, and their interpretation should be addressed to the advising office of the college in which the student's major department is located.

Students are strongly encouraged to schedule an appointment with an academic adviser at least once each semester, preferably before registering for succeeding semester course work.

University Academic Publications

The *Undergraduate Catalog* contains information on admission policies and procedures, graduation requirements, academic regulations, expenses, housing, financial aid, and other student services, as well as detailed descriptions of academic majors, minors, and course offerings. Copies are available to current students from the university's bookstore, and to prospective students from the Office of Admissions. It is online at www.reg.niu.edu/ugcat

The *Graduate Catalog* contains detailed statements of Graduate School policies and procedures, curricula, and expenses, and lists the graduate course offerings of the various departments. Copies are available from the Graduate School office. It is online at www.reg.niu.edu/gradcat.

The *College of Law Bulletin* provides information regarding application procedures, academic requirements, course offerings, and tuition and fees. Copies may be obtained from the College of Law. It is online at law.niu.edu.

Schedule of Classes

The *Schedule of Classes* supplies timetables of class offerings (except for those offered by the College of Law). It describes registration and fee payment procedures and provides a detailed academic calendar. It is online at www.reg.niu.edu/cfdocs/findclass/search.htm

Undergraduate Information

General Information: (815) 753-1000

World Wide Web site: www.niu.edu

The World Wide Web site provides access to the sites of NIU academic colleges, departments/schools, and many of the university's offices, as well as an online version of this catalog. However, the printed version of this catalog is the definitive version of program descriptions and of academic policies and procedures contained therein.

Below is information regarding NIU offices that prospective students might want to contact. E-mail addresses for other NIU offices are available through the NIU World Wide Web site.

Office of Admissions
Northern Illinois
University DeKalb, IL 60115-2857
(815) 753-0446
(800) 892-3050 (toll-free for Illinois callers only)
E-mail: admissions-info@niu.edu

Educational Services and Programs
Northern Illinois University DeKalb, IL 60115-2854
(815) 753-0201
(800) 892-3050 (toll-free for Illinois callers only)

Office of Registration and Records
Northern Illinois University
DeKalb, IL 60115-2871
(815) 753-0681
E-mail: regrec@niu.edu

Student Financial Aid Office
Northern Illinois University
DeKalb, IL 60115-2872
(815) 753-1395
(800) 892-3050 (toll-free for Illinois callers only)
E-mail: finaid@niu.edu

Housing and Dining
Northern Illinois University
DeKalb, IL 60115-2877
(815) 753-1525
E-mail: housing-dining@niu.edu

Center for Access-Ability Resources
Northern Illinois University
DeKalb, IL 60115-2879
(815) 753-1303

Health Services
Northern Illinois University
DeKalb, IL 60115-2879
(815) 753-1311

University Honors Program
Northern Illinois University
DeKalb, IL 60115-2854 (815) 753-0694
E-mail: honors@niu.edu

NORTHERN ILLINOIS UNIVERSITY

Undergraduate Catalog 2006-07

Effective Fall Semester 2006

College of Business
College of Education
College of Engineering and Engineering Technology
College of Health and Human Sciences
College off Liberal Arts and Sciences
College of Visual and Performing Arts

NIU Bulletin Series (USPS 706-780)
Volume 38, Number 2, May 2006

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Academic Year Calender

The current *Schedule of Classes* should be consulted for registration dates.

Fall Semester 2006

April-August
New student and family orientation sessions

August 21-25, Monday-Friday
Department, college, and university faculty meetings

August 28, Monday
Beginning of classes

September 1, Friday
Last day for an undergraduate to add or drop a first-half-semester or full-semester course

September 4, Monday
Labor Day (no classes)

September 7, Thursday
Last day to request no release of directory information at the Office of Registration and Records

September 12, Tuesday
Last day to change a course from credit to audit or from audit to credit

September 15, Friday
Last day to change a course from regular grading to pass/fail
Last day to change a first-half-semester course from pass/fail to regular grading or from regular grading to pass/fail, or from audit to credit or credit to audit

September 22, Friday
Last day to withdraw from a first-half-semester course
Last day for an undergraduate to appeal a grade from spring semester or summer session 2006

October 2, Monday
Last day for an undergraduate to pay fee for December 2006 graduation

October 6, Friday
Last day to change a course from pass/fail to regular grading
Last day to resolve an NR grade from summer session 2006
Last day to designate a course to be repeated under the undergraduate repeat policy

October 20, Friday
Last day for an undergraduate to withdraw from a full-semester course or from the university

October 21, Saturday
End of the first half of the semester

October 23, Monday
Beginning of second half of semester

October 27, Friday
Last day to add or drop a second-half-semester course

November 3, Friday
Last day for an undergraduate to make up a grade of incomplete from spring semester or summer session 2006

November 10, Friday
Last day to change a second-half-semester course from regular grading to pass/fail or from pass/fail to regular grading, or from audit to credit or from credit to audit

November 17, Friday
Last day to withdraw from a second-half-semester course

November 21, Tuesday
Beginning of Thanksgiving break after regularly scheduled classes

November 27, Monday
Resumption of classes
Last day to change or declare a major for the fall semester

December 11-16, Monday-Saturday
Final examinations

December 16, Saturday
End of fall semester

December 17, Sunday
Commencement

June 2006

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

July

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Spring Semester 2007

October-January
New student and family orientation sessions

January 8-12, Monday-Friday
Department and college faculty meetings

January 15, Monday
Martin Luther King, Jr., Holiday (no classes)

January 16, Tuesday
Beginning of classes

January 22, Monday
Last day for an undergraduate to add or drop a first-half-semester or full-semester course

January 25, Thursday
Last day to request no release of directory information at the Office of Registration and Records

January 30, Tuesday
Last day to change a course from credit to audit or from audit to credit

February 2, Friday
Last day to change a course from regular grading to pass/fail
Last day to change a first-half-semester course from pass/fail to regular grading or from regular grading to pass/fail, or from audit to credit or from credit to audit

February 9, Friday
Last day to withdraw from a first-half-semester course
Last day for an undergraduate to appeal a grade from fall semester 2006

February 23, Friday
Last day to change a course from pass/fail to regular grading
Last day to resolve an NR grade from fall semester 2006
Last day to designate a course to be repeated under the undergraduate repeat policy

March 1,Thursday
Last day for an undergraduate to pay fee for May 2007 graduation

March 9, Friday
Last day for an undergraduate to withdraw from a full-semester course or from the university

March 10, Saturday
End of first half of semester. Beginning of spring break after regularly scheduled classes

March 19, Monday
Resumption of classes. Beginning of second half of semester

March 23, Friday
Last day to add or drop a second-half-semester course

March 30, Friday
Last day for undergraduates to make up a grade of incomplete from fall semester 2006

April 6, Friday
Last day to change a second-half-semester course from regular grading to pass/fail or from pass/fail to regular grading, or from audit to credit or from credit to audit

April 13, Friday
Last day to withdraw from a second-half-semester course

April 20, Friday
Last day to change or declare a major for the spring semester

May 4, Friday
Reading Day

May 5, 7-11, Saturday, Monday-Friday
Final examinations

May 11, Friday
End of spring semester

May 12, Saturday
Commencement

December

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

January 2007

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

A Guide to Reading This Catalog

Course Designators

ACCY–Accountancy
AHLS–Clinical Laboratory Sciences
AHP–Allied Health Professions
AHPH–Public Health and Health Education
AHPT–Physical Therapy
ANTH–Anthropology
ART–Art
ARTD–Art Design
ARTE–Art Education
ARTH–Art History
ARTS–Art 2-D and 3-D Studio
BIOS–Biological Sciences
CAHA–Adult and Higher Education
CAHC–Counseling
CHEM–Chemistry
COMD–Communicative Disorders
COMS–Communication Studies
CSCI–Computer Science
ECON–Economics
ELE–Electrical Engineering
ENGL–English
EPFE–Foundations of Education
EPS–Educational Psychology
ETR–Research and Assessment
ETT–Instructional Technology
FCNS–Family, Consumer, and Nutrition Sciences
FINA–Finance
FLAL–Applied Linguistics and General
FLAR–Arabic
FLBU–Burmese
FLCH–Chinese
FLCL–Classical Languages
FLFR–French
FLGE–German
FLIN–Indonesian
FLIS–Foreign Language Independent Study
FLIT–Italian
FLJA–Japanese
FLKN–Korean
FLMT–Foreign Language Methods
FLPL–Polish
FLPO–Portuguese
FLPT–Foreign Language Student Teaching
FLRU–Russian
FLSP–Spanish
FLST–Special Topics
FLTA–Tagalog
FLTE–Foreign Language Instructional Technology
FLTH–Thai
FLTR–Foreign Language Translation
GEOG–Geography
GEOL–Geology
HIST–History
IBUS–Interdisciplinary Business
IDSP–Inter-College Interdisciplinary
IEDU–Interdisciplinary Education
IEET–Interdisciplinary Engineering and Engineering Technology
IENG–Industrial Engineering
IHHS–Interdisciplinary Health and Human Sciences
ILAS–Interdisciplinary Liberal Arts and Sciences
INTL–International Programs
JOUR–Journalism
KNDN–Physical Education Dance
KNPE–Physical Education
LEBM–School Business Management
LEEA–Educational Administration
LESM–Sport Management
LTDH–Deaf and Hard of Hearing
LTIC–Bilingual/ESL
LTLA–Language Arts
LTRE–Reading
MATH–Mathematical Sciences
MEE–Mechanical Engineering
MET–Meteorology
MGMT–Management
MILS–Military Science
MKTG–Marketing
MUSC–Music
NURS–Nursing
OMIS–Operations Management and Information Systems
PHIL–Philosophy
PHYS–Physics
POLS–Political Science
PSYC–Psychology
SOCI–Sociology
STAT–Statistics
TECH–Technology
THEA–Theatre Arts
TH-D–Dance Performance
TLCI–Curriculum and Instruction
TLEC–Early Childhood Education
TLEE–Elementary Education
TLRN–Teaching and Learning
TLSE–Special Education
UBUS–Interdisciplinary Business
UEDU–Interdisciplinary Education
UEET–Interdisciplinary Engineering and Engineering Technology
UHHS–Interdisciplinary Health and Human Sciences
UNIV–University-Wide Interdisciplinary
WOMS–Women's Studies

H–This letter following a course number indicates an honors course. Special honors sections of other courses are also offered each term; these are listed in the Schedule of Classes and are identified there by the "H" suffix.

T–This letter following a course number indicates that an old number is being reused for a new course.

X–This letter following a course number indicates that the course is crosslisted in another department. A student can receive credit for such a course in only one department.

Abbreviations Used in This Catalog

Baccalaureate Degrees

B.A.–Bachelor of Arts
B.F.A.–Bachelor of Fine Arts
B.G.S.–Bachelor of General Studies
B.M.–Bachelor of Music
B.S.–Bachelor of Science
B.S.Ed.–Bachelor of Science in Education

Other Abbreviations

CRQ–Corequisite
GPA–Grade point average
PRQ–Prerequisite

Course Information

The system of numbering courses is as follows.

Noncredit courses: 1-99
Lower-division courses: 100-299
Upper-division courses: 300-499
Graduate courses: 500-699
Some 400-level courses may be taken for graduate credit; these courses are asterisked in the *Schedule of Classes*. (See "Undergraduates in Courses for Graduate Credit.")

Undergraduate course offerings appear in the following pages by department, with the departments arranged alphabetically within the colleges. Interdisciplinary courses appear at the beginning of college sections and under "International Programs." (Departmental and college sections may be located by means of the table of contents.)

Each course is assigned a certain number of semester hours of credit. In general, one semester hour represents the equivalent of one class hour of lecture or recitation or two hours of laboratory work per week for one semester. The semester-hour value of each course listed is shown by an arabic numeral in parentheses immediately after the title of the course. Some course descriptions include a list of topics for intensive or specialized study which the course may cover in different semesters. The student can find out which topic is covered in a given semester by checking the course offering in the *Schedule of Classes.*

Definitions of Terms Used in This Catalog

Academic dismissal: Dismissal from the university for not maintaining the required grade point average (GPA).
Accredited institution: A postsecondary institution that is accredited by the appropriate commission of a regional agency (New England Association of Schools and Colleges, Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, Northwest Association of Schools and Colleges, Southern Association of Colleges and Schools, or Western Association of Schools and Colleges).
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 semester.
Auditing: Registering for and attending a class regularly without completing the work required for credit. (No grade points or credit hours are granted for audited courses.)
Competency examination: An examination given to determine if a student meets or surpasses the expected level of achievement for a core competency requirement in the general education program. Passing a core competency examination fulfills the requirement for the core competency but gives no credit, i.e., it reduces the required number of hours in general education but does not reduce the number of hours required for a degree. Information on competency examinations is available from the Office of Testing Services.
Concurrent enrollment: Enrollment by a student at both NIU and another institution, if any course taken at the other institution is in session at any time during the NIU semester or summer session in question.
Corequisite: A requirement, usually enrollment in a course, which should be undertaken at the same time as the course being described (if the corequisite has not been completed previously).
Credit by examination: A procedure through which a student can obtain college credit by passing examinations. Credit is available through Advanced Placement (AP), the College-Level Examination Program (CLEP), and NIU proficiency examinations. AP examinations are administered by high schools, while the Office of Testing Services administers some CLEP and proficiency examinations; proficiency examinations are also administered by academic departments.
Departmental requirements: Courses offered by a department and specified by that department as necessary for completion of a given course of study.
Drop: A procedure which allows a student to delete a course from the schedule through the fifth calendar day of the semester. This course does not appear on the student's permanent academic record. An administrative office may drop students from courses in which they are not eligible to enroll.
Elective: A course that a student chooses to enroll in, as distinguished from a required course at the university level or in a given departmental course of study.
Emphasis: A subdivision of an undergraduate major. Courses and total hours required may vary in a multi-emphasis major.
Encumbrance: A hold placed on a student's record as a result of an unfulfilled obligation to the university or of a disciplinary action. A student with an encumbrance preventing registration is not eligible to participate in class work.
Endorsement: The written notation entered upon the face of a teaching certificate designating additional specific subjects and/or grade levels which an individual is qualified to teach. Endorsements are earned by taking designated course work in a specific discipline area.
Entitlement program: A specific teacher certification program approved by the Illinois State Board of Education to be offered by an institution of higher education.
GPA hours: The number of semester hours for which grades of A, B, C, D, or F are recorded.
Grade point: The numerical value given to letter grades. A "D" is equivalent to 1 point per semester hour, a "C" to 2 points, a "B" to 3 points, and an "A" to 4 points.
Grade point average (GPA): A student's scholastic average, computed by dividing the total number of grade points earned by the total number of credit hours attempted at NIU.
Half-session courses: Courses which are offered for the first or second half of an academic term, rather than a full term. They are distinguished in the Schedule of Classes by a letter "F" (first half semester) or "L" (last half) after the course number.
Hold: See "Encumbrance."
Honors courses: Special courses or sections of courses designed to offer intellectual challenge and personal attention to particularly able students. Honors courses are identified by an H suffix on the course number.
Incomplete: A grade (I) sometimes granted when a student is temporarily unable to complete course requirements or take a final examination because of unusual personal circumstances.
Major: An extensive program of study in a designated subject area at the undergraduate level.
Minor: A limited course of study in a designated subject area at the undergraduate level. A student may not take a minor offered by the department of his or her major unless this is specifically permitted in the description of the minor.
Nondegree student: A student who does not hold a degree and is not currently seeking one. Application for this status should be made to the Office of Admissions.
Part-time student: A student who takes fewer than 12 semester hours during the semester or fewer than 6 semester hours during the summer session.
Pass/fail: An option which allows a student to take certain courses on a pass or fail basis rather than for a letter grade.
Prerequisite: A requirement, usually completion of a course, which should 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 administered by academic departments and the Office of Testing Services. See "Credit by examination."
Readmission: A procedure by which a student who was previously enrolled in the university but whose attendance was interrupted for more than one year is reaccepted into NIU.

Recognized institution: An institution in a country outside of the U.S. that is recognized by that nation's Ministry of Education, or similar authority, as a post-secondary, academic-degree-granting institution.

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

Semester hour: The university's unit of academic credit reflecting a standard expectation of course activity.

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

Visiting student: A student who is regularly enrolled at another institution but who is taking courses at NIU. Application for this status should be made to the Office of Admissions.

Withdrawal: Formal action by which a student officially discontinues participation in a course; a record of enrollment remains on the student's permanent academic record. This action must be taken by the deadline published each term in the Schedule of Classes.

An Introduction to NIU

Northern Illinois University (NIU) is a state-assisted coeducational institution which offers programs in the basic disciplines, the arts, and the professions through courses conducted on the campus in DeKalb and at a number of outreach centers throughout northern Illinois.

The university offers six degrees at the baccalaureate level: Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Music (B.M.), Bachelor of Fine Arts (B.F.A.), Bachelor of Science in Education (B.S.Ed.), and Bachelor of General Studies (B.G.S.).

Northern Illinois University offers approximately 70 fields of study for undergraduate students in the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Liberal Arts and Sciences, and Visual and Performing Arts. The basic undergraduate curriculum consists of a minimum of 120 semester hours, 29-41 of which are devoted to general education courses providing an educational base for advanced and specialized study.

NIU has selective entrance requirements; students who meet them can reasonably expect to graduate from the university. Students who have decided on a major field of study when they enter the university are assigned to the college in which that major is offered, while those who have not decided on a field of study may find that the general education courses, which all students take, will help them determine a major. Within certain limits, students are free to change their majors as their goals change.

Certain programs cannot accept everyone who wants to major in them, but everyone admitted to NIU is eligible to compete for places in such programs. The programs for which there is competition screen students through a set of pre-major courses. Successful completion of this package of courses has been an excellent indicator of success in these programs.

The quality of NIU's undergraduate education is very high, largely because of the connection between undergraduate and graduate programs. In most fields, undergraduate students will study with professors who are doing important research in their disciplines. Furthermore, NIU offers strong counseling support to students throughout their years as undergraduates through academic advising, personal counseling, and career and placement counseling. As a residential university, NIU provides cultural, athletic, and other supportive activities within an atmosphere in which the total undergraduate learning experience is enriched.

NIU is located in DeKalb, Illinois, a community of 40,000 people, 65 miles west of Chicago. Thus, it offers the advantages of ease in daily living associated with a medium-sized town while at the same time providing the cultural advantages of a nearby major urban center. In addition, many of NIU's programs are enhanced by the university's proximity to high technology research in the Chicago and suburban area as well as a variety of opportunities for clinical experience necessary in certain fields. Because of its comprehensive, high quality programs, the flexibility it offers students in making choices of career and major, its advantageous location and residential benefits, Northern Illinois University is an excellent choice for an undergraduate education.

Northern Illinois University Mission and Scope

The central mission of the university is the transmission, expansion, and application of knowledge through teaching, research and artistry, and public service. In fulfilling that mission, Northern Illinois University meets the needs of students for liberal, professional, technical, and lifelong education.

The university recognizes that it has a basic obligation to contribute to the betterment of the society of which it is a part. The university believes that the quality of individual and social life depends on the quality of mind; and it commits itself to preparing students for effective, responsible, and articulate membership in the complex society in which they live as well as in their chosen professions or occupations.

Recognizing that students will need to learn throughout their lives, the university provides them with the opportunity to become more competent in analytical thought, informed judgment, and effective communication and to develop an appreciation for the life of the mind.

The university makes significant contributions to the expansion of knowledge. It believes that active programs in research and artistry promote intellectual vitality and enrich an institution's instructional mission and its service to the broader community. It enthusiastically accepts its responsibility to contribute to the nation's scientific and technological leadership, to support advances and innovations in education, to bring ideas to bear on issues of public policy, to contribute to the sustained appreciation of our diverse cultural heritage, and to prepare a new generation of scholars and educational leaders. It accepts a responsibility to prepare citizens who understand the increasingly international nature of contemporary life.

The multiple and ever-changing demands of society require the continuing development of academic and professional programs that are current, responsive, and of the highest possible quality. The university thus seeks to recruit and retain faculty of national stature from diverse cultural and ethnic backgrounds, attentive to developments in their respective disciplines, and capable of educating students who will be able to serve the region, the state, the nation, and the world with distinction in the coming decades. Convinced that the intellectual resources of the nation are held in common, the university hopes to maintain access for all segments of the population, and, within the constraints of its budget, intends to admit those who can meet its entrance standards, to retain those who can benefit from its programs, and to educate students to the extent of their capabilities and desires.

In pursuit of these objectives, Northern Illinois University currently offers programs of study in the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Law, Liberal Arts and Sciences, and Visual and Performing Arts. It awards the baccalaureate degree in a wide range of programs and offers a comprehensive set of master's degrees, the Juris Doctor, a limited number of sixth-year programs, and the Doctor of Education and the Doctor of Philosophy. The university's undergraduate student body is drawn primarily from within the state. The institution's professional programs are designed to be especially attractive to employed adults, in that courses are offered both on and off campus and are scheduled to accommodate the needs of the working public. Northern's doctoral programs draw from a national and international student base and build upon the programmatic strengths of the institution.

Northern Illinois University 's history reflects flexibility in the face of change and consistency in the pursuit of excellence. In this, the university expects its future to confirm its past.

Accreditation and Affiliation

Northern Illinois University is accredited by the Higher Learning Commission and is a member of the North Central Association. The university is also fully accredited by the National Council for Accreditation of Teacher Education to offer teacher education programs and offers several teacher certification programs which are approved by the Illinois State Board of Education. NIU is included in the Doctoral/Research Universities–Extensive category of the Carnegie Foundation for the Advancement of Teaching and is a member of the National Association of State Universities and Land-Grant Colleges.

The university and its colleges have institutional membership or other affiliations in or with the American Association of Colleges for Teacher Education, American Council on Education, Association of State Colleges and Universities, Council of Graduate Schools, and Universities Research Association.

In the College of Business, programs leading to the baccalaureate and master's degrees are accredited by AACSB International–The Association to Advance Collegiate Schools of Business.

In the College of Education, the emphasis in athletic training available in the B.S. major in kinesiology is accredited by the Commission on Accreditation of Allied Health Education Programs.

In the College of Engineering and Engineering Technology, the undergraduate programs in electrical engineering, industrial engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). In the technology program, the emphases in electrical engineering technology, manufacturing engineering technology, and nuclear engineering technology have been developed as appropriate according to ABET, and the emphasis in industrial technology is accredited by the National Association of Industrial Technology.

In the College of Health and Human Sciences, the School of Allied Health Professions offers a clinical laboratory sciences program which is accredited by the National Accrediting Agency for Clinical Laboratory Sciences and a physical therapy program which is accredited by the Commission on Accreditation in Physical Therapy Education. The Department of Communicative Disorders offers a graduate degree with specializations in audiology and speech-language pathology that are accredited by the American Speech-Language-Hearing Association and a specialization in rehabilitation counseling that holds accreditation from the Council on Rehabilitation Education. The specialization in marriage and family therapy in the Master of Science program in applied family and child studies offered by the School of Family, Consumer, and Nutrition Sciences is accredited by the Commission on Accreditation for Marriage and Family Therapy. In the School of Family, Consumer, and Nutrition Sciences, the B.S. in family and child studies is accredited by the Council on Accreditation of Services for Families and Children Inc. and the Dietetic Internship, taken in conjunction with the M.S. degree in nutrition and dietetics, is accredited by the Commission on Accreditation/Approval for Dietetics Education. The undergraduate and graduate programs in the School of Nursing are accredited by the Commission on Collegiate Nursing Education.

In the College of Liberal Arts and Sciences, the Master of Public Administration degree offered by the Department of Political Science has its standards certified by the National Association of Schools of Public Affairs and Administration, and the clinical psychology area within the Doctor of Philosophy degree program in the Department of Psychology is accredited by the American Psychological Association.

Within the College of Visual and Performing Arts, the programs in art, music, and theatre arts are accredited, respectively, by the National Association of Schools of Art and Design, the National Association of Schools of Music, and the National Association of Schools of Theatre.

The College of Law is accredited by the American Bar Association and is a member of the Association of American Law Schools.

The Campus

The DeKalb Campus

The 755-acre main campus of Northern Illinois University is located in the city of DeKalb, a community of about 40,000 located 65 miles west of Chicago 's Loop, on the East-West Tollway (I-88). The campus, which features two lagoons and a wooded area, has grown from a single building in 1899 to a modern, 58-building campus. The first building, Altgeld Hall, originally known as "the Castle on the Hill," still stands and has recently undergone extensive renovation.

Regional Sites

NIU offers courses and programs at various locations throughout the northern Illinois region. The NIU Outreach Centers, located in Hoffman Estates, Naperville, and Rockford, are multimedia learning environments for NIU academic classes. The Lorado Taft Field Campus in Oregon, Illinois, is home to programs studying various aspects of environmental education not available in the traditional classroom. Additionally, NIU has engaged in a community college partnership with Rock Valley College in Rockford, Illinois, conveniently offering NIU baccalaureate degree completion programs on Rock Valley College 's Stenstrom Center campus. Also see "Regional Programs."

The facilities of all four regional sites are available for meetings, conferences, workshops, and retreats by NIU and non-NIU groups. Contact the individual site for rates and availability, or call (866) 855-1239, or log on to www.outreach.niu.edu.

University Office Hours

Most administrative offices are open Monday through Friday from 8 a.m. to 12 noon, and from 1 to 4:30 p.m. University office hours are subject to change. For current information consult the most recent *Schedule of Classes.* All offices are closed on legal holidays.

Visitors may obtain information at the Campus Information Center from 7:30 a.m. to 11 p.m. daily. Prospective students may obtain information at the Office of Admissions, Williston Hall, from 8:30 a.m. to 4:30 p.m., Monday through Friday, and from 9 a.m. to 12 noon, Saturdays, September through May. Generally, the Office of Admissions is the only administrative office open on Saturdays.

Faculty Office Hours

Faculty members who teach maintain regular office hours or provide other means to promote student-faculty consultation, in accordance with department policy. These office hours are included in course syllabi and publicly posted each academic term. Arrangements more convenient to students than office visits (e.g., e-mail or chat groups) may be substituted for office hours where provided for by department policy.

The Academic Year

The academic year consists of two semesters of approximately 16 weeks each, and a summer session which includes freshmanlevel courses for recent high school graduates who wish to begin college work immediately.

Undergraduate Academic Programs

Undergraduate programs at NIU are organized under the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Liberal Arts and Sciences, and Visual and Performing Arts. Each of these six colleges coordinates programs for a group of departments of related disciplines and offers specialized academic services for students majoring in one of its departments. Almost every department has one or more major programs; many majors include specific emphases.

The Baccalaureate Experience

Northern Illinois University is a large, complex institution with a mission that includes a strong commitment to undergraduate education. Central to this commitment is the establishment of an intellectual environment that encourages the formation of the essential habits of the educated person–curiosity, rigorous observation, tolerant understanding, and informed judgment. The diverse academic programs in each of the distinctive colleges are unified by common expectations for the achievement of the baccalaureate degree.

Baccalaureate degree holders from NIU should be able not only to appreciate the intrinsic value of human knowledge, but also to use it to engage in both scientific and philosophical inquiry, imaginative and creative–as well as abstract and critical–thinking, the solving of problems, and integrative thinking synthesizing knowledge derived from varied disciplines. The individual with a baccalaureate degree, moreover, should possess intellectual curiosity, understanding of diverse cultural heritages, and a proper regard for different values, ideas, and ways of life. All who aspire toward a baccalaureate degree from NIU are expected to seek responsibility for self and others, to achieve a basis for moral integrity and a philosophy of life, and to arrive at an appreciation of artistic and other creative endeavors, in addition to achieving physical, emotional, and intellectual self-awareness with the ability for self-assessment, along with an understanding of the potential for human freedom amidst global interdependence.

The baccalaureate degree includes general education requirements for all students and an in-depth study in at least one major area as well as individual elective choices. These obligations are met simultaneously and, together, fulfill the curricular intent of the degree.

Successful completion of the baccalaureate degree should mean that the student will have developed (a) effective habits in logical thinking, (b) communication skills, (c) quantitative skills, (d) an understanding of and ability to use modern technology, (e) sophisticated practices in using resources, (f) mature interpersonal behavior in various settings, and (g) those unique skills necessary for one's chosen area of in-depth study.

Baccalaureate Degree Programs

Individual departments should be consulted in the catalog for major requirements and to determine emphases and areas of study which may be pursued within a major.

Baccalaureate Degrees Offered

Northern Illinois University offers the Bachelor of Arts (B.A.), Bachelor of Fine Arts (B.F.A.), Bachelor of General Studies (B.G.S.), Bachelor of Music (B.M.), Bachelor of Science (B.S.), and Bachelor of Science in Education (B.S.Ed.) degrees in six colleges. The following lists these degrees and indicates the colleges and departments/schools offering them. For page references for information about a specific major, see the index at the back of this catalog.

Bachelor of Arts (B.A.) and Bachelor of Science (B.S.)

College of Business

Accountancy (B.S.)
Finance (B.S.)
Management (B.S.)
Marketing (B.S.)
Operations Management and Information Systems (B.S.)

College of Education

Kinesiology and Physical Education (B.S.)
Teaching and Learning (B.S.)

College of Engineering and Engineering Technology

Electrical Engineering (B.S.)
Industrial Engineering (B.S.)
Mechanical Engineering (B.S.)
Technology (B.S.)

College of Health and Human Sciences

Allied Health Professions (B.S.)
Communicative Disorders (B.S.)
Family, Consumer, and Nutrition Sciences (B.S.)
Health and Human Sciences (B.G.S.)
Nursing (B.S.)

College of Liberal Arts and Sciences

Anthropology (B.A./B.S.)
Biological Sciences (B.S.)
Chemistry and Biochemistry (B.S.)
Communication (B.A./B.S.)
Computer Science (B.S.)
Economics (B.A./B.S.)
English (B.A.)
Foreign Languages and Literatures (B.A.)
Geography (B.A./B.S.)
Geology and Environmental Geosciences (B.S.)
History (B.A./B.S.)
Mathematical Sciences (B.S.)
Philosophy (B.A.)
Physics (B.S.)
Political Science (B.A./B.S.)
Psychology (B.A./B.S.)
Sociology (B.A./B.S.)

College of Visual and Performing Arts

Art (B.A.)
Music (B.A.)
Theatre and Dance (B.A.)

Bachelor of Fine Arts (B.F.A.)

College of Visual and Performing Arts

Art
Theatre and Dance

Bachelor of General Studies (B.G.S.)

College of Education
College of Engineering and Engineering Technology
College of Liberal Arts and Sciences
College of Visual and Performing Arts

Bachelor of Music (B.M.)

College of Visual and Performing Arts

Music

Bachelor of Science in Education (B.S.Ed.)

College of Education

Kinesiology and Physical Education
Teaching and Learning

College of Health and Human Sciences

Allied Health Professions

College of Visual and Performing Arts

Art

Baccalaureate Degree Majors

The following list of undergraduate majors shows the degree(s) available. In addition, contract majors are offered by the Colleges of Education (B.S.), Engineering and Engineering Technology (B.S.), Health and Human Sciences (B.S.), Liberal Arts and Sciences (B.A. and B.S.), and Visual and Performing Arts (B.A.)

Accountancy–B.S.
Anthropology–B.A. and B.S.
Art–B.A.
Art education–B.S.Ed.
Art history–B.A.
Biological sciences–B.S.
Business administration–B.S.
Chemistry–B.S.
Clinical laboratory sciences–B.S.
Communication studies–B.A. and B.S.
Communicative disorders–B.S.
Computer science–B.S.
Early childhood studies–B.S.
Economics–B.A. and B.S.
Electrical engineering–B.S.
Elementary education–B.S.Ed.
English–B.A.
Family and child studies–B.S.
Finance–B.S.
French–B.A.
Geography–B.A. and B.S.
Geology and environmental geosciences–B.S.
German–B.A.
Health education–B.S.Ed.
Health sciences–B.S.
History–B.A. and B.S.
Industrial engineering–B.S.
Journalism–B.A. and B.S.
Kinesiology–B.S.
Management–B.S.
Marketing–B.S.
Mathematical sciences–B.S.
Mechanical engineering–B.S.
Meteorology–B.S.
Music–B.A. and B.M.
Nursing–B.S.
Nutrition, dietetics, and hospitality administration–B.S.
Operations and information management–B.S.
Philosophy–B.A.
Physical education–B.S.Ed.
Physics–B.S.
Political science–B.A. and B.S.
Psychology–B.A. and B.S.
Public health–B.S.
Russian–B.A.
Sociology–B.A. and B.S.
Spanish–B.A.
Special education–B.S.Ed.
Studio art–B.F.A.
Technology–B.S.
Textiles, apparel, and merchandising–B.S.
Theatre arts–B.F.A.
Theatre studies–B.A.

Honors Program

The University Honors Program provides a challenging educational experience for students of high academic promise and achievement who have a commitment to excellence. The program permits such students to participate actively in the plan and design of their own educational directions within the overall university and departmental curricula. The Honors Program is broad and inclusive enough to provide this opportunity to students in all undergraduate colleges.

Honors sections are available in all general education areas, as electives, and, by prior arrangement, in virtually all majors. These courses differ from other courses in that they encourage more open exchange between the student and the professor, both inside and outside the classroom. Students are encouraged to pursue a subject in depth and to develop their own interests through independent study.

Since all honors credit applies toward graduation requirements, an honors student may complete the program without additional time requirements; a student may also withdraw from the program without loss of credit. Graduation With University Honors frequently gives the student a distinct advantage in applying for professional or graduate school and for employment.

Departmental honors are offered in a number of departments. Credit earned in departmental honors programs may be included within the 27-hour requirement for University Honors. Qualified students are encouraged to apply for departmental honors as well as University Honors.

Academic Program

The program is divided into two phases. Recognition for Phase I, Lower Division Honors, requires 15 semester hours of honors course work with a minimum GPA of 3.20 in honors courses and a minimum overall GPA of 3.00. Included within these 15 hours is a Cornerstone course taken in the fall semester of the freshman year. Recognition for Phase II, Upper Division Honors, requires completion of 12 semester hours of 300- and 400-level honors course work with a minimum GPA of 3.20 in those courses and a minimum overall GPA of 3.20. Included within these 12 hours are an Honors Seminar, taken during the first year of Phase II, and an honors independent study project, completed during the senior year.

The total program, University Honors, involves a minimum of 27 semester hours (approximately nine courses) of honors work, 12 of which must be outside the major. Students may earn honors credit in general education, elective, and major courses with a grade of A, B, or C. However, the student must earn an A or B in all contract and independent study courses in order to receive honors credit for these courses. A minimum cumulative GPA of 3.20 in all honors course work accepted for honors credit and a minimum overall cumulative GPA of 3.20 are required for recognition of University Honors.

Admission Requirements

The program welcomes not only freshmen but students who wish to enroll in the University Honors Program during or after the freshman year, either from within NIU, as transfer students, or as graduates of community colleges with an associate's degree (A.A. or A.S.) in a baccalaureate-oriented program.

Admission of entering freshmen into Phase I of the University Honors Program is based on a minimum composite ACT score of 27 or SAT score of 1220 and graduation in the upper 10 percent of the high school class. Students whose academic record reflects quality work but who do not meet the above criteria are invited to apply for admission on probationary status as space permits. Students at NIU or who transfer from other institutions as freshmen or sophomores may enter Phase I if they have a cumulative GPA of 3.20 or better (on a 4.00 scale). Admission into Phase II of the program for transfer and native students who have attained junior status is based on a minimum cumulative GPA of 3.20 (on a 4.00 scale).

Honors Transfer Credit

A maximum of 15 semester hours of honors transfer credit will be accepted and applied toward meeting only Phase I requirements for University Honors with no recognition of Lower Division Honors. The following conditions must be met for acceptance of Honors transfer credit.

- The honors course work must have been completed in an established Honors Program that is a member of the National Collegiate Honors Council.
- The honors course work must be accepted by NIU toward the student's major(s), minor(s), or general education requirements, or as electives.
- A grade of B or better must have been earned in the honors course work offered for honors transfer credit.
- The student must have a minimum cumulative GPA of 3.20 on a 4.00 scale for all college course work attempted at all institutions attended.

It is the student's responsibility to provide documentation of honors course work to the NIU University Honors Program for evaluation and verification.

Degrees with Distinction

Students who complete only Phase I will be awarded the distinction of Lower Division Honors on the official transcript.

Students who complete only Phase II will be awarded the distinction of Upper Division Honors on the official transcript and on the diploma.

Students who complete both Phase I and Phase II of the University Honors Program and have attained an overall GPA of at least 3.20 will graduate With University Honors. This designation will appear on the official transcript and on the diploma.

Additional Program Services

New freshman honors students are required to attend an overnight orientation session at the Lorado Taft Field Campus. Other services include help in designing an academic program, housing on honors residence floors in Douglas Hall, regular advising, and a variety of extracurricular academic, cultural, and social events, both on and off campus. Honors students also have opportunities to participate in special honors seminars sponsored by the National Collegiate Honors Council, to study outside of the United States, and to attend state, regional, and national honors conferences.

Further information about the honors program may be obtained from the office of the University Honors Program, Campus Life Building 110, (815) 753-0694.

Teacher Certfication Programs

See "Teacher Certification Requirements."

Admission

Some majors, emphases, and areas of study offered by NIU limit admissions. Admission to NIU does not guarantee admission to a specific major. See "Limited Admissions and Limited Retention Requirements" in this section of the catalog and individual department sections.

Undergraduate Admission

NIU does not discriminate on the basis of race, color, religion, sex, age, marital status, national origin, disability, or status as a disabled veteran or Vietnam-era veteran, or any other factor unrelated to professional qualifications, in its admission procedures and in access to its programs. However, factors such as academic record, test scores, special talents or abilities, likelihood of success at NIU, personal character, and references may be taken into account in the admission process.

Applicants will be considered for admission to the university if they meet the requirements specified under any of the following headings.

- Freshmen
- Transfer Students
- Illinois Public Community College Graduates
- International Students
- Postgraduate Students

Some applicants may be eligible for dual admission to NIU and an Illinois public community college. See "Dual Admissions."

Applicants who do not meet the admission requirements for the categories listed above may apply for special admission to the university. Information about these opportunities may be found under "Special Admission to the University."

Applicants who desire to enroll for a limited period at the university may find information about these opportunities under the following headings.

- Nondegree Students
- Non-graduated Secondary School Students
- Visiting Students

Former NIU students should refer to the section "Readmission of Former NIU Students."

Applicants must meet additional criteria and/or submit additional documents if they wish to be considered for admission to the following units that administer limited admissions majors, emphases, and/or areas of study. See "Limited Admissions and Limited Retention Requirements."

- Department of Communication (communication studies)
- Department of Computer Science
- Department of Kinesiology and Physical Education (athletic training emphasis)
- Department of Sociology
- Department of Teaching and Learning (early childhood studies; elementary education)
- Department of Technology (nuclear engineering technology emphasis)
- School of Allied Health Professions (clinical laboratory sciences; health sciences/physical therapy)
- School of Art (art education; visual communication area of study)
- School of Family, Consumer, and Nutrition Sciences (early childhood studies; family and child studies)
- School of Music
- School of Nursing
- School of Theatre and Dance (B.A. major in theatre studies; B.F.A. emphasis in acting; B.F.A. emphasis in design and technology)

The College of Business has limited retention. See " College of Business " and individual departments.

Application Procedure

Application Materials

Correspondence about undergraduate admission to the university should be addressed to the Office of Admissions, Williston Hall 101, P.O. Box 3001, Northern Illinois University, DeKalb, Illinois 60115-2857. All applicants may be requested to submit the following materials.

- A formal application for admission.
- An official high school transcript indicating class rank and courses completed. Class rank should be indicated as of the end of the sixth, seventh, or eighth semester unless the applicant will be an early graduate.
- An official ACT assessment or SAT Reasoning Test score report. (Students' copies cannot be accepted.) The ACT code for NIU is 1102. The SAT code for NIU is 1559.
- An official transcript from each college attended.
- Application fee.

When to Apply

Applications are available from the Office of Admissions and students are encouraged to apply as soon as possible. Students can apply after the following dates.

Term	*Apply after*
Spring 2007	September 1, 2006
Summer 2007	September 1, 2006
Fall 2007	September 1, 2006

Application Deadlines

The completed application and all supporting documents must be on file in the Office of Admissions by the dates listed below. However, early application is strongly recommended.

Space limitations and/or budget constraints may necessitate earlier deadlines.

The size of the freshman class will be determined by the level of university resources available to maintain the quality of academic programs. The schedule on which applications will be reviewed provides for competitive admissions by class rank and ACT/SAT scores on a space-available basis.

Individual colleges and departments may also have earlier application deadlines. Please refer to the section titled "Limited Admissions and Limited Retention Requirements" for specific dates.

If any published application deadline date falls on a Saturday or a Sunday, complete applications and all supporting documents will be accepted on the immediately following Monday.

Term.....Deadline
Spring 2007.....December 1, 2006
Summer 2007.....May 15, 2007
Fall 2007.....August 1, 2007

Students applying for reinstatement, for a change to degree status, or for transfers petitioning their admission decision, completed applications and all supporting materials must be on file by the following dates.

Term.....Deadline
Spring 2007.....November 15, 2006
Summer 2007.....May 1, 2007
Fall 2007.....July 15, 2007

ACT/SAT Scores

Applicants must take either the ACT or SAT Reasoning Test assessment and request that the score reports be forwarded to NIU from the testing office. Although NIU welcomes the addition of the writing tests introduced by both ACT and SAT, NIU will recommend but not require the ACT writing test and consider only the SAT critical reading and mathematical scores for admission consideration until the predictive value of the writing test is determined. The ACT code for NIU is 1102. The SAT code for NIU is 1559. Applicants who have not taken either of these tests should contact their local high school or community college counselor to register for a testing session. Applicants who have never taken one of the tests and have been out of high school for more than three years may request in writing a waiver of this requirement. ACT/SAT scores will not affect the admission of postgraduates or of transfer students with 24 or more transferable semester hours.

Applicants with Disabilities

Applicants with disabilities submit the same information as all applicants. Students with documented disabilities who believe their entrance examination scores or high school performance was adversely affected by special circumstances may submit a separate statement directly to the NIU Center for Access-Ability Resources.

Admission to Major Programs

Applicants may indicate an “intended major” on their application for university admission. An “intended major” indicates an area of interest and does not guarantee admission to a degree program in that specific area. Procedures for declaring a major are described in the “Academic Regulations” section of this catalog.

The university’s undergraduate academic work is organized under the Colleges of Business, Education, Engineering and Engineering Technology, Health and Human Sciences, Liberal Arts and Sciences, and Visual and Performing Arts. Individual colleges control admission to degree programs. The selection of any courses to be required prior to admission to a major will be determined by each college or department in accordance with its respective expectations. In general, students are strongly encouraged to complete successfully the core competency requirements and some general education courses early in their programs of study.

Immunization Policy

The Illinois College Student Immunization Act and university policy require that all students born on or after January 1, 1957, enrolling in class at the NIU DeKalb campus provide written evidence of current immune status with respect to certain communicable diseases, or evidence of exemption from this requirement, by the tenth calendar day of the first term enrolled.

Students born before January 1, 1957, and students enrolled in NIU prior to fall 1989 are exempt from the immunization requirement. Students enrolled in some courses held at regional sites might be exempt from the immunization requirement. Students should contact their academic adviser to find out if they qualify for such an exemption. Students applying for medical/religious exemption should contact Health Services for information.

Failure to provide the required documentation and be in compliance with the state law by the tenth calendar day of the first term enrolled will result in a $25 late processing fee. An encumbrance will also be placed on the records of students who are not in compliance.

Immunization information may be obtained from Health Services at (815) 753-9585.

Admission Criteria

Freshmen

An applicant for freshman admission must be a graduate of a secondary school at the time of enrollment or have attained high school equivalency through the General Educational Development (GED) test. Applicants must submit

A formal application for admission.

An official high school transcript indicating class rank, GPA, and courses completed or an official GED score report.

An official ACT score report sent to NIU by ACT Inc. or an official SAT score report sent to NIU by the College Board.

Application fee.

Individuals applying for admission will be evaluated and notified of their admission decision according to the “Criteria for Admission” and “Schedule for Application Review.”

Please note that the actual size of the new freshman class will be determined by the level of university resources available to maintain the quality of academic programs. The schedule on which applications will be reviewed provides for competitive admissions by class rank and ACT/SAT score on a space-available basis.

Criteria for Admission

Individuals will be considered for admission if they meet one of the following sets of criteria. Weighted and unweighted class rank and weighted and unweighted GPA will be considered.

Applicants who have graduated or will graduate from a secondary school prior to enrollment at NIU must meet the following criteria.

Applicants who rank in the upper half of their graduating class or who have a GPA of at least 2.75 on a 4.00 scale must have a composite ACT score of at least 19 or critical reading and mathematics SAT score of at least 870.
OR
Applicants who do not rank in the upper half of their class but who rank in the upper two thirds of their graduating class or who have a GPA of at least 2.50 on a 4.00 scale must have a minimum composite ACT score of 23 or SAT critical reading and mathematics score of 1030.

In addition to the high school class rank and ACT/SAT score requirements, all applicants must have successfully completed the following high school courses (one unit equals one year).

English. Four units (three of which must be courses emphasizing written and oral communication and literature).

Mathematics. Three to four units of college preparatory mathematics, including one year of geometry and one year of advanced algebra and/or trigonometry. For students intending to major in mathematics, science, business, or engineering, four years of college preparatory mathematics are very strongly recommended. Further, all students, regardless of intended major, are strongly encouraged to take a mathematics course or a course with a mathematics prerequisite during the year before they enroll in a mathematics course at NIU.

Science. Two to three units (two of which must be courses in the physical or biological sciences). One unit must be a laboratory science.
Social Studies. Two to three units (one of which must be U.S. history or a combination of U.S. history and government).
Foreign Language, Art, Music, or Vocational Education. One to two units (one of which must be course work in foreign language, art, or music).
Additional Course Work. Up to three units of the required fifteen may be distributed throughout any of the five categories of course work listed above. Vocational education may satisfy up to four of the units.

Students who complete the required fifteen units in college preparatory courses including two years of a foreign language, advanced mathematics, composition, literature, and at least one unit in chemistry or physics will be more likely to (a) qualify for advanced placement or proficiency credit and (b) complete their programs of study within the amount of time anticipated for a given baccalaureate degree from NIU.

Applicants who are not high school graduates must have attained high school equivalency through General Educational Development (GED) tests. In addition, applicants must have a minimum composite ACT score of 23 or minimum critical reading and mathematics SAT score of 1030.

Freshman Petition Review
Freshman applicants who think their application warrants additional consideration despite their not fulfilling the minimum ACT/SAT score, high school rank, and/or course-specific requirements described above may petition for review of their application status. To request such a review, prospective freshmen must have a letter of petition on file in the Office of Admissions by the dates listed below. The letter should describe circumstances relevant to the petition, including information about academic potential that is not reflected in the ACT/SAT scores or high school performance.

Term	*Petition by*
Spring	November 15
Summer	May 1
Fall	July 15

Schedule for Application Review
Individuals who meet all applicable admission criteria will be notified of an admission decision as soon as possible following the completion of their application file. Students are encouraged to apply early. Applicants will be considered for admission as long as space is available.

The actual size of the new freshman class is determined by the level of university resources available to maintain the quality of the academic programs. The schedule on which applications are reviewed provides for competitive admissions on a space-available basis.

Spring Semester 2007

Individuals who submit complete applications including all transcripts and test score information by November 1, 2006, and who satisfy minimum admissions criteria are considered for admission on a competitive basis and notified of the admission decision on or before December 1, 2006.

Individuals who submit complete applications after November 1, 2006, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available and notified prior to December 15, 2006, as long as space is available.

Priority consideration is given to individuals whose applications are complete by December 1, 2006, who rank in the top 10 percent of their high school class and have an ACT composite score of at least 19 or critical reading and mathematics SAT score of at least 870 and to individuals who rank in the upper third of their high school class and have an ACT composite score of at least 21 or critical reading and mathematics SAT score of at least 950 or an equivalent ACT/SAT rank combination. Such individuals will be admitted and notified of their admissions decision on a rolling admissions basis.

Summer Session 2007 and Fall Semester 2007

Individuals who submit complete applications including all transcripts and test score information by November 15, 2006, and who satisfy minimum admissions criteria are considered for admission on a competitive basis and notified of the admission decision on or before February 1, 2007.

Individuals who submit complete applications after November 15, 2006, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available.

Priority consideration is given to individuals whose applications are complete by February 1, 2007, who rank in the top 10 percent of their high school class and have an ACT composite score of at least 19 or critical reading and mathematics SAT score of at least 870 and to individuals who rank in the upper third of their high school class and have an ACT composite score of at least 21 or critical reading and mathematics SAT score of at least 950 or an equivalent ACT/SAT rank combination. Such individuals will be admitted and notified of their admissions decision on a rolling admissions basis.

A personal statement is strongly recommended only for students who do not satisfy the priority consideration parameters. This statement should focus on areas such as leadership experiences, expected contributions to the NIU community, and any personal experiences in overcoming adversity.

Dual Admissions

The dual admissions agreement has been developed to provide a seamless transition in the transfer process from participating community colleges to NIU. Students who are admissible to NIU and to the participating community colleges are eligible to benefit from the dual admissions agreement. Students indicate an intention to participate in this agreement by signing a statement of intent that includes their primary area of academic interest at the time of their admissions to NIU and the participating community college. All students taking part in the dual admissions agreement are subject to the same admissions, matriculation, and degree requirements governing all other NIU and participating community college students. Students who participate in the dual admissions agreement and earn an A.A. or A.S. degree will be entitled to the same academic benefits as undergraduates new to NIU regardless of previous enrollment at NIU. Currently, agreements are in place with Black Hawk College, City Colleges of Chicago, College of DuPage, College of Lake County, Elgin Community College, Highland Community College, Illinois Valley Community College, Joliet Junior College, Kishwaukee College, McHenry County College, Moraine Valley Community College, Morton College, Oakton Community College, Rock Valley College, Sauk Valley Community College, Triton College, Waubonsee Community College, and William Rainey Harper College. Contact NIU's Office of Admissions for further information and for an updated list of other Illinois community colleges participating in similar agreements.

Transfer Students

To maintain the quality of academic programs, the number of transfer students admitted each semester will be determined by the level of university resources available. The schedule on which applications will be reviewed provides for competitive admission on a space-available basis. Early application is encouraged. Also see "Transfer Credit" under "Academic Regulations."

Transfer applicants must submit the following.

A formal application for admission.

An official high school transcript. (Applicants with 24 or more semester hours of transferable credit are not required to submit a high school transcript.)

An official transcript from each college attended (sent by each college to the Office of Admissions).

An official ACT or SAT score report sent directly to NIU by the testing company. Applicants with 24 or more semester hours of transferable credit are not required to submit an official ACT/SAT score report but are encouraged to do so for research purposes.

Application Fee.

Enrollment in courses offered at NIU which fulfill NIU's core competency requirement in mathematics requires an entry-skill level, determined through placement testing and/or explicit prerequisites, at least equal to that expected from the successful completion of an intermediate algebra course. Such a course is not offered by NIU. However, an intermediate algebra course offered by Kishwaukee College can be taken on the NIU campus.

Applicants who have attempted up to and including 12 semester hours of credit are evaluated as freshmen for admission purposes and must meet the current freshman admission requirements. The GPA earned for the attempted 12 hours or fewer will not affect the admission decision. (This policy has been developed to encourage students to take advantage of local post-secondary educational opportunities, either during their senior year in high school or during the summer before NIU enrollment, without jeopardizing their admission to NIU.)

Applicants who have attempted more than 12 semester hours but who have earned fewer than 24 semester hours of transferable college-level credit at the time of application must

have a GPA of at least C (2.00 on a 4.00 scale) from all colleges attended (as computed by NIU standards).

be in good standing at the last college attended.

satisfy NIU's competitive transfer GPA.

meet the current freshman admission criteria.

Applicants who have earned between 24 and 59 semester hours of transferable college-level credit at the time of application must

have a GPA of at least C (2.00 on a 4.00 scale) from all colleges attended (as computed by NIU standards).

be in good standing at the last college attended.

satisfy NIU's competitive transfer GPA.

Applicants who have earned 60 or more semester hours of transferable college-level credit at the time of application must

have a GPA of at least C (2.00 on a 4.00 scale) from all colleges attended (as computed by NIU standards).

be in good standing at the last college attended.

Transfer Petition Review

Transfer applicants with 24 or more semester hours of transferable credit who petition for a review of their admission decision must have all documents that are required for transfer admission and a letter of petition on file in the Office of Admissions by the dates listed below. The letter should describe circumstances relevant to the petition, including information about educational and career goals.

Term	*Petition by*
Spring	November 15
Summer	May 1
Fall	July 15

Illinois Public Community College Graduates

A graduate of an Illinois public community college who has not previously attended Northern Illinois University and who has completed a baccalaureate-oriented A.A. or A.S. or A.A.T. degree will be admitted to NIU. The student will enter with junior standing and all NIU general education requirements will be considered complete if the student has the following qualifications prior to enrolling at NIU.

An Associate in Arts (A.A.) or an Associate in Science (A.S.) degree or an Associate in Arts in Teaching degree in Early Childhood, Secondary Math, or Special Education in a baccalaureate-oriented program from an Illinois public community college.

At least a C average (2.00 on a 4.00 scale) as calculated by the community college.

At least 60 semester hours of credit.

Good standing at the last college attended.

An Illinois public community college graduate with an Associate in Engineering Science, Associate in Arts in Teaching in secondary science, or an Associate in Fine Arts degree is eligible for admission to NIU but is not eligible for the benefits indicated above.

An Illinois public community college graduate with an Associate in Applied Science, an Associate in General Studies, or an Associate in Liberal Studies degree is not eligible for the benefits indicated above. These students will receive the same consideration for admission as other transfer students.

Former NIU students (non-degree, visiting, or regular) who have since attended a community college should refer to "Readmission of Former NIU Students."

An applicant from an Illinois public community college who has previously been a visiting or non-degree student at NIU and who wishes to enter NIU with junior standing and general education requirements considered complete must petition for these benefits in a letter accompanying the application. It is expected that students who petition will have met the basic minimum GPA and other requirements for the A.A. or A.S. degree or approved A.A.T. degree from the community college.

These benefits do not necessarily satisfy any additional course requirements that may be needed for a specific major program at NIU.

Questions regarding the Illinois Articulation Initiative GECC may be directed to the Transfer Center, (815) 753-0687.

Transfer Students from Community or Junior Colleges

An applicant who has attended an Illinois public community college but has not graduated with a baccalaureate-oriented A.A. or A.S. degree or approved A.A.T. degree will receive the same consideration for admission as all other transfer students. This policy also applies to all applicants who have attended or graduated from private or out-of-state community or junior colleges. All course work will be evaluated according to the standards and regulations stated for transfer students in the "Transfer Credit" section under "Academic Regulations," and the student may find that general education requirements have been met.

Community college transfer students interested in teacher certification should carefully read the section "Teacher Certification Requirements."

Effective fall semester 1998 and after for new transfer students and students reentering NIU with an A.A. or A.S. degree or approved A.A.T. degree from an Illinois public community college, Northern Illinois University is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois transferable General Education Core Curriculum (GECC) between participating institutions. Successful completion of the GECC at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and allows students to transfer this portion of an associate or baccalaureate degree from one participating IAI institution to another without incurring a loss of credit. See "Transfer of Illinois Articulation Initiative Credit to NIU" and "Illinois Articulation Initiative Core Curriculum" for further information.

International Students

International students with fewer than 45 semester hours of college credit must rank in the equivalent of the upper one-third of their high school graduating class. Students from all countries where English is not the native or official language must submit a score from TOEFL, the Test of English as a Foreign Language, in lieu of the official composite ACT or SAT score.

All application materials, including the application for admission, letters of recommendation, all transcripts or national examination scores and/or transcripts from colleges or universities attended (with an English translation), all test scores including the TOEFL, and proof of adequate financial support must be on file in the International Student and Faculty Office by May 1 for the fall semester, by October 1 for the spring semester, or by April 1 for the summer session. International students will not be permitted to register for any courses until they have completed the minimal requirements for admission to a university as stated by the United States Immigration and Naturalization Services and the United States Department of Education. All necessary forms for this procedure will be available during the orientation period preceding each term. Undergraduate international students must register for a minimum of 12 semester hours each semester.

For complete information concerning the TOEFL examination, applicants should write to Test of English as a Foreign Language, Educational Testing Service, Box 899, Princeton, New Jersey 08540, U.S.A.

A comprehensive orientation program is provided by the International Student and Faculty Office for new international students from abroad. This begins when the student, while still at home, is granted admission to the university, and continues after the student's arrival on campus. The program includes dissemination of information and materials concerning the university, the university community, and U.S. immigration rules and regulations; a week of intensive orientation activities at the beginning of the first semester of attendance; and follow-up activities during the remaining period of residency and study. A one-time orientation fee is charged for this program.

Postgraduate Students

Postgraduate students are those who hold baccalaureate degrees from an accredited U.S. college or university, or from a recognized foreign institution, and wish to take additional undergraduate courses or to earn a second baccalaureate degree. To qualify for admission, a postgraduate applicant must submit an official transcript indicating the degree previously earned if the degree was not awarded by NIU. A student requesting an evaluation of transfer credit must submit a transcript from each college or university attended. In addition, an applicant wishing to pursue a major, emphasis, or area of study which has limited admission requirements must submit transcripts from all schools attended. Postgraduate applicants are subject to the review procedures applicable to limited admission programs. See "Limited Admissions Requirements."

The GPA for all postgraduate students, including those whose initial baccalaureate degree was earned at NIU, will include only postgraduate course work attempted at NIU.

Postgraduate status allows a student to take 100- through 400-level courses for undergraduate credit only; a postgraduate may not take courses for graduate credit.

An individual with a baccalaureate degree who wishes to take 500- or 600-level graduate courses or approved 400-level courses for graduate credit should apply to the Graduate School for admission as a graduate student or for student-at-large status. (See the *Graduate Catalog.*)

Whether postgraduate or a graduate-level (graduate student or student-at-large) classification is the more appropriate depends on the student's academic objectives, and students are encouraged to consult with appropriate departmental or other academic advisers in making their choice. The student's classification may also affect eligibility for certain types of financial assistance, and students should contact a financial aid counselor in the Student Financial Aid Office for information. Students may request to change their classification from postgraduate to graduate or vice versa. The change in classification must be requested by completing the appropriate application not later than the first regularly scheduled class day of the academic term for which it is to be effective.

Special Admission to the University

Alternate Admission to the University

Educational Services and Programs

Northern Illinois University has a commitment to provide opportunities and supportive services to students who do not meet traditional admissions criteria. The primary office which administers such admissions options and services is Educational Services and Programs (ESP), a comprehensive, coordinated collection of counseling, academic preparation, and support services designed to assist students in gaining entry into and ultimately graduating from college.

The guiding mission of ESP is to identify, recruit, and assist capable students whose pre-college education has not fully enabled them to take maximum advantage of their potential and the opportunities of higher education at NIU. While ESP serves a diverse student population, racial minorities and others historically underrepresented in higher education are especially sought.

Admission Criteria

Students who demonstrate strong motivation and potential for success in college but who do not meet one or more of the traditional criteria for admission to NIU may be considered for alternate admission using the services of ESP. Beyond the ACT/SAT and high school performance records, NIU looks for characteristics such as special talents, significant activities and accomplishments, leadership potential, personal commitment, and goal orientation. Admission can thus be extended to students who agree to conscientiously make use of the ESP and related university services as a means to ensure success at NIU.

Admission to NIU through ESP is only available to residents of Illinois and only in the fall semester.

Admission Procedures

Official admission is not considered final until all of the following steps have been completed.

Submit a completed undergraduate admissions application to the ESP office by April 1.

Submit application fee.

Submit an official high school transcript.

Have ACT or SAT scores (and, if taken, other college entrance test scores) sent to NIU.

Write and submit an autobiographical letter.

Meet with an ESP counselor for a personal evaluative interview.

Participate in a full two-day summer orientation session at NIU.

Sign all agreements and official acceptance papers.

Sponsored Admission by an Academic Department

An academic department may sponsor a limited number of new freshmen who do not meet regular admission requirements but who show special talent appropriate to the programs of that department. The academic records of these students must meet a minimum standard set by the university Admission Policies and Academic Standards Committee. A recommendation for sponsored admission must be made by the appropriate department. Additional information may be obtained from the Office of Admissions.

Limited-Period Enrollment

Nondegree Students

Initial Enrollment as a Nondegree Student

A person who has not attended NIU may apply for status as a nondegree student if she or he does not hold a postsecondary degree and has not been enrolled in either a secondary or collegiate institution for at least two years. Applicants granted admission as nondegree students may register in undergraduate courses for which they meet stated prerequisites. Students who have previously attended NIU must apply according to the guidelines listed in the "Readmission of Former NIU Students" section below.

Applicants must declare an area of academic interest for advisement purposes.

All students admitted as nondegree students are eligible to submit transcripts and request an evaluation of transfer credit as part of the admission process.

Students who are deemed ineligible to enroll as nondegree students may make an appeal to the Appeals Committee.

Continued Enrollment as a Nondegree Student

Continued enrollment as a nondegree student will be permitted until the individual has earned 15 semester hours at NIU. Students who wish to continue their enrollment after the maximum 15 hours at NIU have been completed must formally apply to the Office of Admissions to change their status from nondegree students to regular degree-seeking students. These students must follow the admission procedures and guidelines set forth under the section titled "Changing to Degree Status."

Academic Policies

The nondegree student is subject to all university policies and regulations in effect during each term enrolled, including those pertaining to academic probation and dismissal. The college in which the student has indicated an area of academic interest will provide appropriate college-level services to these students (course and university withdrawals, overload permits, etc.).

The benefits that apply to the A.A. or A.S. or approved A.A.T. degree as described under the section titled "Illinois Public Community College Graduates" are not assured to former students who have previously attended NIU as a nondegree student. These students must petition for these benefits in a letter accompanying the application for readmission.

Changing to Degree Status

Nondegree students who seek to change to degree status and who meet the current criteria for freshman or transfer admission must have a GPA of at least 2.00 in course work completed at NIU; submit a new application for admission; and submit all documents necessary for freshman or transfer admission as listed in the "Admission Criteria" section.

The new application and all required documents must be received in the Office of Admissions by the appropriate deadline date designated below for changing to degree status.

Nondegree students who seek to change to degree status but who do not meet the current criteria for freshman or transfer admission must have a GPA of at least 2.00 in course work completed at NIU; submit a new application for admission; submit all documents necessary for freshman or transfer admission as listed in the "Admission Criteria" section; and submit a letter of petition describing circumstances relevant to the petition including educational and career goals.

The new application, all documents, and the letter of petition must be received in the Office of Admissions by the appropriate deadline date designated below for changing to degree status.

Term	*Applications complete by*
Spring	November 15
Summer	May 1
Fall	July 15

Nongraduated Secondary School Students

Under the following conditions, a nongraduated secondary school student may enroll for university courses. Secondary school students wishing to apply in this category should use the standard university admission application form. Registration for courses under these provisions does not constitute admission to the university.

During fall or spring semesters, concurrent with secondary school attendance, a student may register for one or more courses at the university by submitting a written recommendation from the secondary school supporting such enrollment, submitting the written consent of a parent or guardian, and paying the standard tuition and fees.

For the summer session, students who rank in the upper one third of their high school class at the end of their junior year may enroll full- or part-time at the university during their summer session between their junior and senior years by submitting written consent of a parent or guardian, providing official verification of high school class rank, and paying standard tuition and fees.

Additional information is available from high school counselors or the NIU Office of Admissions.

Visiting Students

Undergraduate students admitted to or regularly enrolled in another institution may apply for temporary admission and take courses at NIU as visiting students. Enrollment as a visiting student is limited to one semester during any academic year (fall or spring), not including summer session. Students enrolled in International Studies programs are not subject to the one-semester limitation.

Students who wish to attend NIU as visiting students during the summer session must submit the following documents.

A completed application.

A letter or official transcript certifying good academic standing at the last college attended, or a letter of admission verifying acceptance to an academically accredited two- or four-year college or university for a forthcoming semester.

Application fee.

Students who wish to attend NIU as visiting students during the fall or spring semester must satisfy minimum admission criteria for either freshman or transfer students and submit the following documents.

A completed application.

An official high school transcript and ACT or SAT score report and/or college transcript confirming that minimum published freshman or transfer admission criteria for NIU are satisfied.

A letter or official transcript certifying good academic standing at the last college attended, or a letter of admission verifying acceptance to an academically accredited two- or four-year college or university for a forthcoming semester.

Application fee.

A visiting student is subject to all university policies and regulations in effect during each term enrolled, including those pertaining to academic probation and dismissal. The College of Liberal Arts and Sciences will provide appropriate college-level services to visiting students (course and university withdrawals, overload permits, etc.).

A student who previously attended NIU as a visiting student, whose last enrollment was as a visiting student, and who since has earned a baccalaureate oriented A.A./A.S. degree or approved A.A.T. degree from an Illinois public community college is not assured of the benefits that apply to the A.A. or A.S. described in the section of this catalog entitled "Illinois Public Community College Graduates." These students must petition for these benefits in a letter accompanying the application for readmission. Other students who have previously attended NIU must apply according to the guidelines listed in the "Readmission of Former NIU Students" section following.

Readmission of Former NIU Students

Students who have previously enrolled in the university but whose attendance has been interrupted by more than one year must file an application for readmission with the Office of Admissions. Reentering students who left NIU on academic probation must make an appointment with the appropriate college advising office prior to being cleared to register for classes.

Direct Reentrance

Students who were in good academic standing or on academic probation when they left the university and who have not attended another college or university since leaving must complete and return an application for readmission to the Office of Admissions. Students on academic probation when they left NIU will return on academic probation.

Reentrance with Additional Credit

Students who were in good academic standing or on academic probation when they left the university and who have since taken course work at another educational institution must complete and return an application for readmission to the Office of Admissions. They must also supply the Office of Admissions with an official transcript from each college or university attended since last attending NIU. To be eligible for reentrance, such students must have at least an overall C average (as computed by NIU standards) in all work taken at all other institutions, and must be in good academic standing at the last school attended. Students on academic probation when they left NIU will return on academic probation.

Reentrance of Illinois Public Community College Graduates

A former student who left NIU in good standing, has been away from NIU for at least a fall or spring semester, and reenters with the baccalaureate-oriented associate degree or approved A.A.T. degree from an Illinois public community college earned after leaving NIU will be granted the same academic benefits as Illinois public community college graduates new to NIU if the student left NIU with fewer than 60 total semester hours of credit and has completed no more than 80 total semester hours (including all transfer course work and all NIU course work except courses not counting toward graduation) at the time of reentry.

In addition to receiving the benefits listed under the section headed "Illinois Public Community College Graduates," such a student reentering NIU will also begin a new NIU grade point average. A student not wishing to have the benefits granted to Illinois public community college graduates, which include a new GPA, must inform the Office of Admissions of this at the time of reentry.

Former students who were enrolled as visiting or nondegree students are subject to the restrictions pertaining to those categories and are not assured of the academic benefits granted to Illinois public community college graduates.

A former NIU student who was academically dismissed or left NIU on academic probation and who has since graduated from an Illinois public community college with a baccalaureate-oriented associate degree or approved A.A.T. degree will be granted the same academic benefits as a community college graduate new to NIU if the following conditions are satisfied.

The student had completed fewer than 60 semester hours prior to leaving NIU on academic probation or dismissal.

The student has completed no more than 80 total semester hours (including all transfer course work and all NIU course work except courses not counting toward graduation) at the time of reentry.

The student has been away from NIU for at least a fall or spring semester.

The student was not enrolled as a nondegree or visiting student. A former NIU student who was enrolled as a nondegree or visiting student is subject to restrictions pertaining to those categories and is not assured the benefits granted to Illinois public community college graduates.

A student who reenters under these conditions will return to NIU on final academic probation.

Reinstatement

Students who have been academically dismissed from the university must provide a written petition for reinstatement which describes the expenditure of their time since leaving the university and outlines reasons for believing that their previous record will be improved if they are reinstated. Such students are not eligible for reinstatement until after they have been away for at least one fall or spring semester. Students reinstated after being dismissed for poor scholarship are reinstated on final academic probation and must establish a cumulative GPA of at least 2.00 for all hours taken at this university by the end of the semester or summer session of reinstatement.

Each reinstatement case will be considered by a committee in the student's major college; in no case may it be assumed that after an absence of one semester any student is automatically entitled to reinstatement.

Applications for reinstatement (including an application for readmission, the written petition described above, and transcripts of all course work completed since leaving NIU) must be received in the Office of Admissions by the following dates. In addition, any encumbrances the student has on his or her record (placed by such offices as the bursar, admissions, and health services) must be cleared by the reinstatement deadline.

Term	*Application complete by*
Spring	November 15
Summer	May 1
Fall	July 15

Students who apply for reinstatement after an absence of ten years or longer may request consideration for the benefits of a returning student special reinstatement policy. Such a request will be referred by the Office of Admissions to the college advising office of the intended major for appropriate college and departmental review. If students are reinstated under the provisions of this policy, their new GPA will be determined from course work attempted after the reentry date. All other current university regulations apply, and additional stipulations may be made by the major department. All previously earned hours of NIU course work will be counted toward graduation requirements. Students who reenter under this policy will return to NIU on final academic probation.

Limited Admissions and Limited Retention Requirements

Limited Admissions Requirements

The majors, emphases, and areas of study listed below, offered by the departments and schools indicated, have limited admissions. Admission into these majors, emphases, and areas of study is based on additional criteria. Students planning to pursue these courses of study must fulfill additional requirements such as GPA, specific course work, supplementary documents, and sophomore or junior standing.

In keeping with Northern Illinois University 's commitment to equal opportunity and affirmative action, the restrictions on admission described below are carefully administered to ensure that students from underrepresented groups who are seeking such admission are given the opportunity to accomplish that goal. The university attempts to fulfill societal needs by admitting students from a variety of socioeconomic backgrounds. The limited admissions criteria are applied to ensure that all of the students admitted to such a major, emphasis, or area of study will have achieved above a determined level.

Acting Emphasis
(School of Theatre and Dance)

All applicants (freshmen and transfers) must be eligible for admission to the university. In addition, applicants for the B.F.A. acting emphasis must pass an audition and interview. Contact the School of Theatre and Dance as early as possible for information.

Art Education
(School of Art)

The School of Art limits the number of students admitted to the major in art (B.S.Ed), track 1, teacher certification. Students must have a minimum 2.75 GPA in all NIU and transfer courses to enroll in art education courses and must have a minimum of 2.50 GPA in all NIU courses to obtain teacher certification.

Athletic Training Emphasis
(Department of Kinesiology and Physical Education)

The Department of Kinesiology and Physical Education limits the number of students admitted to the B.S. in kinesiology emphasis in athletic training depending on the resources available. Transfer students compete with other transfer students for admission to the program, and nontransfer students compete with other nontransfer students. The admission requirements outlined below are subject to revision on an annual review. The current admission requirements and admission packet can be obtained in the office of the department adviser.

Students may begin the emphasis in athletic training only in the fall semester. Before a student can be admitted to this emphasis, she or he must have completed the following pre-admission courses with a grade of C or better and have an overall GPA of at least 2.50, including transfer credit.

*CHEM 110, Chemistry (3)
*ENGL 104, Rhetoric and Composition II (3),
OR *ENGL 105, Rhetoric and Composition (3), if placed in ENGL 105,
OR pass the English Core Competency II Examination
*MATH 101, Core Competency in Mathematics (3),
OR *MATH 155, Trigonometry and Elementary Functions (3),
OR *MATH 206, Introductory Discrete Mathematics (3),
OR *MATH 210, Finite Mathematics (3),
OR MATH 211, Calculus for Business and Social Sciences (3),
OR *MATH 229, Calculus I (4)
*PSYC 102, Introduction to Psychology (3)

Admission into the emphasis in athletic training is competitive, and all students who meet the above pre-admission requirements will be required to

complete the athletic training application form including one or more essays.

provide documentation with a NATA certified athletic trainer's signature of observation or experience in an athletic training setting. The observation or experience may take place at the NIU clinical affiliate sites or in other appropriate athletic training settings. The experience may be paid or voluntary.

provide two recommendations from people who are familiar with and/or have supervised the applicant's professional workrelated or volunteer experiences.

An admissions packet containing the application form, hour documentation form, and recommendation forms can be obtained from the department adviser's office.

NIU students who have met the pre-admission requirements should apply for admission to the emphasis in athletic training through the department adviser. Transfer students who have met the pre-admission requirements for this emphasis prior to applying for admission to the university should apply for admission to the emphasis in athletic training at the same time they apply for admission to the university.

Students who have completed the requirements outlined above must apply for program entrance by January 15 and will be considered for admission beginning the following fall semester. Notification of admission to the emphasis in athletic training will be made by March 15.

The Athletic Training Admissions Committee will review all completed applications and, based on the composite of all components of the application, will select students to be interviewed.

Students must be admitted to the emphasis in athletic training before they can enroll in KNPE 264 and KNPE 265.

Because some students will not have completed all course requirements at the time of application, enrollment in the emphasis in athletic training is contingent on selection for admission by the Athletic Training Admissions Committee, maintenance of a minimum cumulative GPA of 2.50 on a 4.00 scale, and completion of all required courses outlined above with a grade of C or better.

It is the responsibility of students to secure a copy of the Athletic Training Student Handbook which describes the policies of the emphasis. Students are required to adhere to all current policies and procedures.

B.G.S. in Health and Human Sciences
(College of Health and Human Sciences)

All applicants must be health or human sciences professionals who hold a professional credential, certification, or license

*Available for general education credit

in a health or human sciences field and have completed an associates degree program or equivalent number of credits. Other professional recognitions in health or human sciences may be considered on an individual basis. Applicants must be eligible for admission to NIU. Contact the College of Health and Human Sciences advising office for application forms.

Clinical Laboratory Sciences Major (School of Allied Health Professions)

The School of Allied Health Professions limits the total number of students admitted to the clinical laboratory sciences major depending upon resources available. This limitation applies to all applicants seeking admission to the clinical laboratory sciences major. Students may enter the professional program only in the fall semester.

The admission requirements outlined below are subject to revision based on an annual review. Applications are reviewed for completion of prerequisites and all general education requirements must be satisfied prior to the beginning of the first semester of the clinical experience.

To be considered for admission to the clinical laboratory sciences major, students must be admitted to NIU and have completed or be in the process of completing a minimum of nine of the prerequisite courses listed below. Admission is competitive and will be based primarily on the GPA in the prerequisite courses and secondarily on the overall GPA. Transfer students are encouraged to contact a program adviser before enrolling to determine whether prior course work satisfies prerequisites. All admission is provisional with the expectation that students selected for admission must have completed all of the following prerequisite courses with a minimum GPA of 2.50 on a 4.00 scale. In rare instances, a student with a GPA of less than 2.50 may be admitted to the program on the basis of other demonstrated strengths.

AHP 318, Medical Terminology (3)
BIOS 208T, Fundamentals of Biology I (3), and BIOS 210, Fundamentals of Biology I Laboratory (1)
BIOS 209T, Fundamentals of Biology II (3), and BIOS 211, Fundamentals of Biology II Laboratory (1)
BIOS 213, Introductory Bacteriology (3),
OR BIOS 313, Microbiology (4)
BIOS 357, Human Anatomy and Physiology (5)
*CHEM 210T, General Chemistry I (3), and *CHEM 212, General Chemistry Laboratory (1)
*CHEM 211T, General Chemistry II (3), and *CHEM 213, General Chemistry Laboratory II (1)
CHEM 230, Introductory Organic Chemistry (3)
CHEM 231, Introductory Organic Chemistry Laboratory (1)
*CSCI 205, Introduction to Computing (3),
OR CSCI 210, Elementary Programming (4)
One mathematics course which meets the core competency requirement (3-4)

All students who meet the above requirements will be required to

submit a completed clinical laboratory sciences program application;

provide a brief written statement explaining why the clinical laboratory sciences major was chosen; and

provide two letters of recommendation from science and/or clinical laboratory sciences faculty who are familiar with the applicant's classroom and/or laboratory abilities.

Students currently enrolled at NIU and transfer students must contact the clinical laboratory sciences program office for application materials. Applicants must submit the required materials by March 1. Notification of clinical laboratory sciences program admission status will be made by April 1. Additional applications may be considered between March 2 and June 15 based upon space availability.

Communication Studies Major (Department of Communication)

The total number of students accepted into a communication studies major is limited by the available resources and is competitive in relation to requirements for declaration. Transfer students compete with other transfer students for admission to the departmental emphases, and nontransfer students compete with other nontransfer students. All students wishing to be formally admitted into one of the communication studies emphases must have completed the following requirements prior to the department's application deadlines.

Completion of a minimum of 15 semester credit hours

A minimum 2.00 cumulative GPA on a 4.00 scale

Completion of the following courses

*ENGL 103, Rhetoric and Composition I (3), or *ENGL 105, Rhetoric and Composition (3), if placed into ENGL 105, or pass the English Core Competency II Examination (0)

For the B.A. degree, a course in a foreign language after placement or a course equivalent to the second semester at the intermediate level, or four years (8 semesters) of the same foreign language in high school with no grade lower than a C, or exemption by examination, or status as a foreign student with a native language other than English

OR

For the B.S. degree, *MATH 210, Finite Mathematics (3), or *MATH 211, Calculus for Business and Social Science (3), or *MATH 229, Calculus I (4), or MATH 230, Calculus II (4)

Students currently enrolled at NIU who have completed the above requirements are eligible to apply for admission to the major during the first through the fifth weeks of the semester. Applications for admission to the department must be filed at the communication department office. Students approved for admission to the program will be notified by the tenth week of the semester. Students may apply during the semester in which they are completing the required courses listed above.

Transfer students who will have completed the above requirements and have indicated on their application for admission to the university that they intend to enroll in an emphasis in communication studies need not apply separately to the department. After such students are accepted into the university, their application will be transmitted to the department for consideration. Students will be notified directly of their admission status.

Transfer students who have been admitted to the university but who have not completed the above requirements should seek departmental advisement at orientation or as soon as they arrive on campus. Such students must follow the deadlines listed above for currently enrolled students, but consideration will be given to their need for access to major courses prior to formal admission into the program.

Computer Science Major (Department of Computer Science)

The total number of students accepted into a computer science major is limited by the available resources and is competitive in relation to requirements for declaration. Transfer students compete with other transfer students for admission to the departmental emphases, and nontransfer NIU students compete with other nontransfer NIU students.

All students wishing to be formally admitted into one of the computer science emphases must have completed a minimum of 30 semester hours with a minimum 2.50 cumulative GPA on a 4.00 scale including the following courses.

*ENGL 103, Rhetoric and Composition I (3), and *ENGL 104, Rhetoric and Composition II (3),
OR *ENGL 105, Rhetoric and Composition (3), if placed into ENGL 105,
OR pass the English Core Competency II Examination (0)

*MATH 206, Introductory Discrete Mathematics (3),
OR *MATH 210, Finite Mathematics (3), and *MATH 211, Calculus for Business and Social Science (3),
OR *MATH 229 and MATH 230, Calculus I and II (8)
CSCI 230, Computer Programming in FORTRAN (4),
OR CSCI 240, Computer Programming in C++ (4)

Once admitted to the major, a student must maintain at least a 2.00 GPA in computer science courses.

Students currently enrolled at NIU who have completed the above requirements are eligible to apply for admission to the major during the third through the sixth weeks of the semester (second through fourth weeks of the summer term). Applications for admission to the department must be filed at the computer science departmental office. Students approved for admission to the program will be notified by the tenth week of the semester. Students may apply during the semester in which they are completing the required courses listed above.

Transfer students who will have completed the above requirements prior to enrollment at the university, who have applied for admission to the university by the dates indicated below, and who have indicated on their application for admission to the university that they intend to enroll in an emphasis in the Department of Computer Science need not apply separately to the department. After such students are accepted into the university, their applications will be transmitted to the department for consideration. Students will be notified directly of their admission status. Accepted students must seek departmental advisement at orientation or as soon as they arrive on campus.

Term	*Applications complete by*
Spring	October 1
Summer	February 15
Fall	February 15

Transfer students who have not completed the above requirements prior to admission to the university must seek departmental advisement at orientation or as soon as they arrive on campus. Such students must follow the deadlines listed above for currently enrolled students, but consideration will be given to their need for access to major courses prior to formal admission into the program.

Design and Technology Emphasis
(School of Theatre and Dance)

All applicants (freshmen and transfers) must be eligible for admission to the university. In addition, applicants for the B.F.A. design and technology emphasis must pass a portfolio review. Contact the School of Theatre and Dance as early as possible for information.

Early Childhood Studies Interdisciplinary Major
(Department of Teaching and Learning/School of Family, Consumer, and Nutrition Sciences)

The Department of Teaching and Learning and the School of Family, Consumer, and Nutrition Sciences limit the number of students admitted to the interdisciplinary major in early childhood studies depending on the resources available. Transfer students compete with other transfer students for admission to the program, and nontransfer students compete with nontransfer students.

The early childhood studies major allows students to choose the emphasis in 04 certification offered by the School of Family, Consumer, and Nutrition Sciences or the emphasis in 04 certification with preschool special education approval offered by the Department of Teaching and Learning. Students should seek advisement early in their academic career for assistance with making this choice. Requirements for each emphasis in 04 certification are found in the respective catalog sections.

Before formally applying for admission to an emphasis in the major in early childhood studies, a student must have attained an overall GPA of at least 2.75 including transfer credit, successfully completed the ICTS Basic Skills Test, provided written proof from an agency of having been fingerprinted, provided verification of TB test, and completed the following courses with a grade of C or better in each.

*COMS 100, Fundamentals of Oral Communication (3)
*ENGL 103, Rhetoric and Composition I (3)
*ENGL 104, Rhetoric and Composition II (3)
*ETT 229, Computers in Education (3), or pass ETT proficiency examination (0)
FCNS 230, Child Development (3)
*PSYC 102, Introduction to Psychology (3)
Two of the following (6)
*EPFE 201, Education as an Agent for Change (3)
*HIST 260, American History to 1865 (3),
OR *HIST 261,American History since 1865 (3)
*MATH 201, Foundations of Elementary School Mathematics (3)
*PHIL 231, Contemporary Moral Issues (3)

A student who has completed these requirements is eligible to apply to one of the emphases in the major in early childhood studies, but satisfying these requirements does not guarantee admission. Admission is competitive based on the GPA in work taken at NIU and/or transferred from other institutions, the quality of the application essay, and successful experience working with young children.

Admission to the selected emphasis is contingent on completing the following prerequisites with a grade of C or better prior to entering the first professional semester.

Additional prerequisites for emphasis in 04 certification (12-13)

*BIOS 103, General Biology (3),
OR *BIOS 104, General Biology (4),
OR *BIOS 109, Human Biology (3)
FCNS 284, Introduction to Family Relationships (3)
*STAT 208, Basic Statistics (3)
TLSE 240, Introduction to Special Education (3)

Additional prerequisites for emphasis in 04 certification with preschool special education approval (16)

FCNS 284, Introduction to Family Relationships (3)
*SOCI 250, Contemporary Social Instituitions (3),
OR *SOCI 260, Introduction to Social Psychology (3),
OR *SOCI 270, Social Problems (3)
TLSE 240, Introduction to Special Education (3)
One general education biology course (3-4)
One general education physical science course (3-4)
Either the biology or physical science course must include a laboratory

Admission to teacher education takes place upon passing the ICTS Basic Skills Test, having a cumulative GPA of at least 2.75, having a grade of C or better in all required courses completed after admission to the emphasis, and successful completion of the first professional semester. Retention in teacher education is contingent on maintaining a cumulative GPA of 2.75 or higher and having a grade of C or better in all required courses completed in subsequent semesters.

Information regarding these pre-admission criteria, including test dates for the ICTS Basic Skills Test, can be obtained from the Department of Teaching and Learning or from the Office of Undergraduate Advisement, School of Family, Consumer, and Nutrition Sciences.

Students who have completed the pre-admission requirements may be considered for admission by meeting the following application deadline. Although students may be admitted to the university for any semester as a pre-early childhood studies major, admission directly into the major is limited to the fall semester only.

*Available for general education credit.

Term.....Applications complete by
Fall.....March 1

Students who have met the pre-admission requirements should apply for admission to the major in early childhood studies as follows. Those students seeking 04 certification with special education approval should apply in the Department of Teaching and Learning and students seeking 04 certification should apply to the School of Family, Consumer, and Nutrition Sciences. Transfer students who have met the pre-admission requirements for the major in early childhood studies prior to applying for admission to the university should apply for admission to the major in early childhood studies through the appropriate department at the same time they apply for admission to the university.

Students must be admitted to an emphasis in early childhood studies before they can enroll in the first professional semester.

Elementary Education Major
(Department of Teaching and Learning)

The Department of Teaching and Learning limits the number of students admitted to the elementary education program depending on the resources available. Transfer students compete with other transfer students for admission to the program, nontransfer students compete with other nontransfer students, and postgraduate students compete with other postgraduate students.

A departmental application for elementary education is required for admission to the major. Students are required to submit a copy of their results from the ICTS Basic Skills Test with the departmental application.

If the requirements below are satisfied, transfer students may apply to the program at the time of application to NIU. Students transferring with fewer than 60 semester hours will need to satisfy all of the criteria below before they may apply.

Students who have completed these requirements are eligible to apply to the elementary education program, but satisfying these requirements does not guarantee admission to the program.

Before formally applying for admission to the elementary education program, a student must have attained an overall GPA of at least 3.00 including transfer credit, successfully completed the ICTS Basic Skills Test, and completed the core competency requirements in communication studies and English with no grade lower than C. Applicants must have a grade of C or better (including NIU and transfer grades) in all of the following required courses by the beginning of the first professional semester.

ARTE 383, Teaching Art in Elementary Schools (3),
OR MUSC 373, Fundamentals, Principles, and Practices in Elementary Music (3)
*EPFE 201, Education as an Agent for Change (3)
EPS 300, Educational Psychology (3)
EPS 304, Development of the Elementary School Child (3)
ETT 229, Computers in Education (3)
*HIST 260, American History to 1865 (3)
*HIST 261, American History since 1865 (3)
KNPE 245, Physical Education for Children (3)
*MATH 201, Foundations of Elementary School Mathematics (3)
*PSYC 102, Introduction to Psychology (3)
TLEE 282, Educational Participation in Clinical Experiences: Elementary Education (1)
TLSE 240, Introduction to Special Education (3)
One laboratory science course (4)

Information regarding these pre-admission criteria, including test dates for the ICTS Basic Skills Test, can be obtained from the department and will be discussed in orientation and advisement meetings.

Students who have completed the pre-admission requirements may be considered for admission in a specific semester by meeting the following application deadlines.

Term.....Applications complete by
Fall.....March 1
Spring.....October 1

NIU students who have met the pre-admission requirements should apply for admission to the elementary education program through the Department of Teaching and Learning. Transfer students who have met the pre-admission requirements for the elementary education program prior to applying for admission to the university should apply for admission to the elementary education program through the Department of Teaching and Learning at the same time they apply for admission to the university.

Students must be admitted to the elementary education program before they can enroll in the first professional semester. Once students are admitted to the program, they ordinarily continue to enroll in the professional semesters as a cohort through the semester of student teaching.

Family and Child Studies Major
(School of Family, Consumer, and Nutrition Sciences)

The School of Family, Consumer, and Nutrition Sciences limits the total number of students admitted to the family and child studies major depending on resources available. Students admitted to the university as freshmen or transfers wishing to major in family and child studies will be classified as pre-majors in the School of Family, Consumer, and Nutrition Sciences until they meet the requirements below and are admitted to the program.

Students may make formal application for consideration for admission to the major in family and child studies after they have satisfied the following requirements. The student must have a cumulative GPA of 2.20 or higher on a 4.00 scale.

All applicants to the major must submit a transcript showing a grade of C or better in the following prerequisite courses for their intended emphasis.

For all emphases (9-10)
*ENGL 104, Rhetoric and Composition II (3),
OR *ENGL 105, Rhetoric and Composition (3), if placed into ENGL 105,
OR pass the English Core Competency II Examination
*PSYC 102, Introduction to Psychology (3)
*STAT 208, Basic Statistics (3),
OR MATH 110, College Algebra (3),
OR having met the mathematics core competency requirement (3-4)

Additional prerequisite for emphasis 1, family and individual development (3)
*SOCI 170, Introduction to Sociology (3),
OR FCNS 230, Child Development (3),
OR FCNS 280, Human Development, the Family, and Society (3)

Additional prerequisite for emphasis 2, family social services (3)
*SOCI 170, Introduction to Sociology (3),
OR FCNS 280, Human Development, the Family, and Society (3)

Additional prerequisite for emphasis 3, child development (3)
FCNS 230, Child Development (3),
OR FCNS 280, Human Development, the Family, and Society (3)

*Available for general education credit.

To be considered for admission, students must have their applications to the university and to the school complete by the following deadlines.

Term.....Applications complete by
Spring.....September 15
Summer/Fall.....March 1

Admission to each emphasis in family and child studies is competitive and will be based primarily on the completion of the prerequisite courses and on the student's overall GPA in course work taken at NIU and/or transferred from other institutions.

All students who have indicated an interest in the programs offered by the school, but have not met all admission criteria, will be classified as pre-majors in the School of Family, Consumer, and Nutrition Sciences. They will be considered for acceptance into departmental emphases according to the procedures set forth below, depending on their status as transfer or continuing students.

Transfer and reentering students' cumulative GPA from all schools attended as calculated by the Office of Registration and Records is used as printed on the students' evaluation of credit. The school will use the GPA from the most recent evaluation of credit on file until 15 semester hours are earned at NIU, with at least 12 of those hours being credit that applies to either their major, minor, or general education requirements.

Students may indicate an interest in the family and child studies program on the application for admission to the university. They must also apply directly to the School of Family, Consumer, and Nutrition Sciences for admission into a specific emphasis after they have met the admission requirements for that emphasis. Students should seek departmental advisement at orientation or as soon as they arrive on campus.

Transfer students who indicate on the application for admission to the university that they intend to enroll in the major in family and child studies should immediately request an application for the School of Family, Consumer, and Nutrition Sciences. After such students are accepted into the university, their applications will be transmitted to the school for consideration for admission. Students should seek departmental advisement at orientation or as soon as they arrive on campus.

Continuing NIU students apply directly to the school for admission into a family and child studies emphasis.

To change from one emphasis to another, the student must apply to the school for admission into the new emphasis.

Health Sciences/Physical Therapy Major
(School of Allied Health Professions)

The School of Allied Health Professions limits the total number of students admitted to the professional physical therapy curriculum depending on resources available. The professional curriculum has two components, an undergraduate course of study leading to a baccalaureate degree in health sciences, and a graduate component leading to a Master of Physical Therapy degree. Students can enter the professional curriculum only through the undergraduate health sciences major. This limitation applies to all applicants seeking admission to the professional physical therapy program, whether enrolled at NIU at the time of application or transferring from another institution. The admission requirements outlined below are subject to revision based on an annual review. Priority will be given to students who have completed NIU's pre-physical therapy program and to Illinois residents. Admission to the professional program is very competitive.

Students may enter the professional program only in the fall semester.

To be considered for admission to the professional health sciences/physical therapy major, students must be admitted to NIU, have a minimum cumulative GPA of 3.00 on a 4.00 scale, including all transfer courses, and have completed by the time of application a minimum of eight of the following prerequisite courses with a minimum GPA of 3.00 on a 4.00 scale. All attempts of any repeated course will be used in the calculation of the required pre-physical therapy GPA.

One year of general biology for science majors with laboratory (8)
BIOS 357, Human Anatomy and Physiology (5)
*CHEM 210T, General Chemistry I (3), and *CHEM 212, General Chemistry Laboratory I (1)
*CHEM 211T, General Chemistry II (3), and *CHEM 213, General Chemistry Laboratory II (1)
*MATH 155,[1] Trigonometry and Elementary Functions (3), OR *MATH 229,[1] Calculus I (4)
*PHYS 210, General Physics I (4)
*PHYS 211, General Physics II (4)
*PSYC 102, Introduction to Psychology (3)
A lifespan development course (3)
An abnormal psychology course (3)
An introductory statistics course (3)
Course work in an adviser-approved focus area excluding required prerequisites and general education courses (12)

In addition, the student must have no more than seven general education and pre-physical therapy required courses remaining to be completed at the time of application.

All students who meet the above requirements will be required to

provide two recommendations from people who are familiar, preferably in a supervisory capacity, with the applicant's professional or work-related experiences. At least one of these recommendations must come from a physical therapist. (Recommendation forms to be used are available from the physical therapy program's office.);

provide documentation of a minimum of 50 hours of experience, either paid or volunteer, in physical therapy setting(s). (Documentation forms to be used are available from the physical therapy program's office.); and

write an essay on a topic to be determined by the program faculty.

The Admissions Committee reserves the right to require an interview.

Since most students will not have completed all course requirements at the time of application, enrollment in the professional program will be contingent on the following.

Selection by the Physical Therapy Admissions Committee for admission to the professional program.

Successful completion of all prerequisite courses prior to the appropriate fall enrollment date.

Completion of all university and general education requirements prior to the appropriate fall enrollment date.

Maintenance of a minimum cumulative GPA of 3.00 on a 4.00 scale, as well as a minimum GPA of 3.00 on a 4.00 scale in all of the prerequisite courses.

Applicants must submit the following materials by February 15 to be considered for admission.

A completed physical therapy program application, including references and experience forms. Applications are available between September 1 and January 31 of each year.

For students new to NIU, a completed university application for undergraduate admission, including high school transcripts and ACT or SAT scores. (See transfer student admission requirements.)

Official transcripts from all colleges and universities attended.

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*Available for general education credit.

[1]Students who have fufilled the general education mathematics requirement and who have passed either a trigonometry or calculus course at a college other than NIU will not be required to take MATH 155 or MATH 229.

Students currently enrolled at NIU must apply directly to the physical therapy program office.

Notification of physical therapy admission status will be made by April 15.

Music Majors
(School of Music)

Applicants must pass an audition and may be required to complete a music theory and aural skills diagnostic test for admission to the School of Music. Music applicants should submit application materials to the Office of Admissions and contact the School of Music, Music Building 140, as early as possible for audition and testing information.

Nuclear Engineering Technology Emphasis
(Department of Technology)

The emphasis in nuclear engineering technology in the Department of Technology is available only to employees of electric power companies who have or are completing the United States Nuclear Regulatory Commission's Reactor Operator Licensure training. For more specific information regarding admission to this emphasis, contact the Department of Technology.

Nursing Major
(School of Nursing)

The School of Nursing limits the total number of students admitted to the program depending on the resources available. This limitation applies to all applicants seeking admission to the nursing major. Nursing applicants who are not R.N.s must successfully achieve a reading comprehension score in compliance with the School of Nursing standards. (Students with an ACT reading test score of 24 or higher and postgraduates who hold baccalaureate or graduate degrees from an accredited U.S. college or university are exempt from this requirement.) Applicants should contact the NIU Office of Testing Services for information about taking the standardized reading test used by the School of Nursing, which may be taken a maximum of two times.

Nursing applicants must achieve a grade of C or better in all nursing prerequisite courses. Admission is competitive and is based on a comprehensive admission profile including such factors as previous academic performance. Students will be competitively considered for admission by each category listed below. Freshmen and transfer applicants will be reviewed once a year for fall admission. Registered nurse students may enter the program in either the fall semester or the spring semester. Students approved for admission to the major will be notified by the tenth week of the semester. Admitted students are required to obtain school advisement at orientation.

Any applicant who has had an extended absence from postsecondary course work or who is attempting a second baccalaureate degree may petition the School of Nursing for special consideration in the admission review process.

To be admitted to and remain in the nursing program, students must meet academic requirements and possess the skills listed as "Essential Performance Components" in the School of Nursing section of this catalog.

Freshmen

Applicants with fewer than 24 post-secondary semester hours completed by the application deadline will be considered as freshmen. Admission is competitive and will be based on such factors as previous academic performance, ACT/SAT score, and high school rank. Applicants new to the university must indicate interest in the nursing program on the application for admission to the university. Applications for admission must be filed at the Office of Admissions. To be considered for admission to the nursing major, freshman applicants must be admitted to NIU by February 15. Applicants currently enrolled at NIU, but who have fewer than 24 semester hours, must have all application documents submitted by February 15 to the College of Health and Human Sciences. Highly qualified freshman applicants who complete the admission processes during fall semester may be offered early admission to the School of Nursing.

Transfer Students

All applicants (whether continuing NIU students or new applicants to the university) with 24 or more post-secondary semester hours, who are not registered nurses, will be considered transfer students into the School of Nursing. Admission is competitive and will be based on the GPA in the prerequisite courses and on the overall GPA. On-campus and off-campus transfer applicants are reviewed as separate applicant pools. Transfer students must be admitted to NIU by February 15 and complete a minimum of five of the following prerequisite courses by the time of application.[1] Additional on-campus and off-campus transfer applications may be considered between March 2 and October 13, based on space availability for fall and spring semesters.

*BIOS 104, General Biology (4)
BIOS 213, Introduction to Bacteriology (3),
OR BIOS 313, Microbiology (4)
BIOS 357, Human Anatomy and Physiology (5)
*CHEM 110, Chemistry (3),
OR *CHEM 210T, General Chemistry I (3), and *CHEM 212, General Chemistry Laboratory I (1)
*ENGL 104, Rhetoric and Composition II (3),
OR *ENGL 105, Rhetoric and Composition (3)
*FCNS 201, Human Nutrition (3)
*FCNS 280, Human Development, the Family, and Society (3),
OR *PSYC 225, Lifespan Development: Childhood through Adulthood (3)
*PSYC 102, Introduction to Psychology (3)
*STAT 208, Basic Statistics (3),
OR STAT 301, Elementary Statistics (4)

All applicants must submit an official copy of ACT Test Scores or take the Accuplacer Reading Examination. Arrangements for taking the Accuplacer Reading Examination may be made through the NIU Office of Testing Services. Applicants with a baccalaureate or higher degree are exempt from the reading score requirement.

Applicants new to the university must have submitted all application materials to the Office of Admissions by February 15. Continuing NIU students should submit all application materials to the College of Health and Human Sciences by February 15.

Since most transfer students may not have completed all prerequisite course requirements at the time of application, enrollment in nursing courses will be contingent upon the successful completion of all prerequisites. One exception may be granted; if necessary, students may schedule concurrent enrollment of either the nutrition course or the statistics course with their first semester nursing courses.

Transfer Students from Nursing Programs

A student transferring from a nursing program to the School of Nursing baccalaureate nursing program is required to request a letter of reference and a statement from the head of the nursing program stating that the student is in good standing within the nursing program, and request a letter of reference from a faculty member teaching in the student's most recently completed semester. These materials are to be mailed directly to the School of Nursing from the originating institution.

*Available for general education credit.
[1]Transfer students are encouraged to contact a program adviser before enrolling to determine whether prior course work satisfies prerequisites.

Registered Nurses

R.N. students will be considered for admission as soon as the NIU application process is complete.

Admission requirements are

graduation from an accredited school of nursing;

admission to NIU as a regular degree-seeking student;

licensure to practice nursing in the state of Illinois;

employment in nursing within the past five years or provide evidence of a refresher course;

GPA from a college or university consistent with the standards required by the NIU School of Nursing;

completion of a goal and expectancy statement; [2] and

two letters of recommendation, one from a previous faculty member and one from a nursing supervisor. [2]

Registered nurses are restricted to completion of no more than 6 semester hours of NIU nursing courses prior to admission to the School of Nursing. Applicants new to the university should submit an application through the Office of Admissions and continuing NIU students should submit an application to the School of Nursing at the office of the College of Health and Human Sciences.

Sociology Major
(Department of Sociology)

Before formally applying for admission to the major or minor program in the Department of Sociology, a student must have an overall GPA of at least 2.00 and have completed the following courses, with a grade of C or better in each.

*ENGL 104, Rhetoric and Composition II (3),
OR *ENGL 105, Rhetoric and Composition (3), if placed into ENGL 105,
OR pass the English Core Competency II Examination
*SOCI 170, Introduction to Sociology (3)

For B.A. students
*STAT 208, Basic Statistics (3),
OR STAT 301, Elementary Statistics (4)

For B.S. students
*MATH 206, Introductory Discrete Mathematics (3),
OR *MATH 210, Finite Mathematics (3),
OR *MATH 229, Calculus I (4),
OR STAT 301, Elementary Statistics (4)

Theatre Studies Major (B.A.)
(School of Theatre and Dance)

All applicants (freshmen and transfers) must be eligible for admission to the university. In addition, applicants to the B.A. program in theatre studies must successfully pass an interview and submit three letters of recommendation preferably from theatre professionals (directors and/or teachers) stating the applicant's potential and competency in the field of theatre. Contact the School of Theatre and Dance as early as possible for information.

Visual Communication Area of Study
(School of Art)

All applicants must be admitted to the university and have a minimum overall GPA of 2.50 on a 4.00 scale, including transfer courses. In addition, prior to taking ARTD 213, students must have completed the following courses with a minimum GPA of 3.00.

ART 100, Drawing Foundation I (3)
ART 101, Drawing Foundation II (3)
ART 102, 2-D Foundation (3)
ART 103, 3-D Foundation (3)

Limited Retention Requirements

To assure students' continuing competence, some majors, emphases, and areas of study have limited retention policies, and students who want to continue their enrollment in them must fulfill certain criteria. These include, but are not limited to, maintaining a designated cumulative and/or major GPA, earning a certain grade in certain courses, successful performance on a standardized performance measure, a portfolio review of a student's past performance, and successful completion of clinical requirements. Students interested in these majors, emphases, or areas of study and those already admitted to them should consult department and college program requirements listed in the individual college and department sections of this catalog. Students are also strongly encouraged to consult with an adviser to assure they continue to qualify for retention in their chosen major, emphasis, or area of study. The College of Business has limited retention. See "College of Business" and other individual colleges and departments.

Child Development Emphasis
(School of Family, Consumer, and Nutrition Sciences)

Students must earn a grade of C or better in FCNS 230 in order to enroll in FCNS 330, 331, and 332.

Family Social Services Emphasis
(School of Family, Consumer, and Nutrition Sciences)

Students must earn a grade of C or better in FCNS 180 in order to enroll in FCNS 382; students must earn a grade of C or better in FCNS 382 in order to enroll in FCNS 383; and students must earn a grade of C or better in FCNS 383 prior to enrollment in FCNS 431B.

Nutrition, Dietetics, and Hospitality Administration Major
(Family, Consumer, and Nutrition Sciences)

Students must earn a grade of C or better in FCNS prerequisite courses before they can enroll in any successive FCNS course to meet the requirements for an NDHA major.

Textiles, Apparel and Merchandising Major
(School of Family, Consumer, and Nutrition Sciences)

Students must earn a grade of C or better in FCNS 152 and FCNS 258 before they can enroll in any FCNS course requiring either FCNS 152 or FCNS 258 as a prerequisite or in any textiles, apparel and merchandising elective or 400-level course.

*Available for general education credit.
[2]Forms for goal and expectancy statements and letters of recommendation are obtained from the School of Nursing

University Graduation Requirements

Major Program

In-depth study in one major area is required in each baccalaureate degree (except the Bachelor of General Studies). Major requirements often include not only courses within the given discipline but also necessary prerequisites and work in related disciplines.

Students must satisfy all the requirements of their major department. Minors are required in certain programs (check departmental requirements) and may be chosen in any program with departmental approval.

Total Credits

A minimum of 120 semester hours that can be applied toward the degree is required for graduation. While most programs have requirements that can be satisfied in 120 hours, a limited number of programs have established through the curricular process their need to require more than 120 hours. See departmental sections of this catalog for a semester-hour breakdown and total for each major.

In fulfilling the 120-semester-hour graduation requirement, no student will be permitted to count more than 8 semester hours in elective physical education activity courses, or more than 6 semester hours in workshop or special/multiple topic courses taken outside the student's major or minor. These limitations include all transfer hours as well as NIU semester hours earned.

Upper-Division Courses

A minimum of 40 semester hours of the total number must be in courses numbered 300 and/or 400. These must include at least 12 semester hours of major departmental courses taken at NIU.

Course Offerings

Although the university attempts to accommodate the course requests of students, course offerings may be limited by financial, space, and staffing considerations or may otherwise be unavailable. Nothing in this catalog may be construed to promise or guarantee registration in any course or course of study (whether required or elective) nor may anything be construed to promise or guarantee the completion of an academic program within a specified length of time.

Course Prerequisites and Corequisites

A prerequisite (PRQ) is a requirement that must be met before a student can register for a course. A corequisite (CRQ) is a requirement that must be undertaken at the same time as a given course (if it has not been completed previously). Students are responsible for following appropriate sequences of courses and should check all course descriptions for prerequisites and/or corequisites.

Students who do not meet PRQ/CRQ requirements but think they are qualified to enroll in a course should consult the department offering the course to determine whether or not it is appropriate to enroll in the course.

Correspondence Courses

Not more than 30 semester hours can be taken in correspondence courses. (NIU does not offer correspondence courses.) Students should check with their college advising offices before enrolling in correspondence courses. See the statement on "Concurrent Enrollment" under "Academic Regulations."

Grade Point Average (GPA)

Students must attain a minimum cumulative GPA of 2.00 in all NIU credit earned and of 2.00 in the major. The GPA in the student's major is calculated using all courses taken in the major department, and only those courses taken in the major department, unless the department specifically states otherwise in its section of this catalog. A cumulative GPA of 2.50 or above is required for graduation in a teacher certification entitlement program.

In order for the university to record on a student's transcript that a minor was successfully completed during the student's undergraduate program, the student must attain a minimum cumulative GPA of 2.00 in all courses taken in the minor at NIU.

Residence Requirement

Candidates for undergraduate degrees from NIU must earn at least 30 semester hours of credit in course work offered by NIU after having earned 80 semester hours. Continuing and reentering students intending to transfer credit to NIU after they have earned 90 semester credit hours or who will exceed 90 semester credit hours upon transfer of that credit must obtain prior approval from their major college office before enrolling in the course(s) which they intend to transfer. Students should also check for other residence requirements in the appropriate college and department listings.

General Education Requirements

The required 29-41 semester hours in the general education program are divided between the core competencies (0-12 semester hours) and distributive studies (a minimum of 29 semester hours)

Core Competency Requirements and Course Descriptions

The requirement of 0-12 semester hours of core competencies ensures that students demonstrate or acquire those basic skills which form the foundation for baccalaureate studies. The core competencies cover reading, writing, listening, speaking, and mathematical skills. Because these skills will be applied, reinforced, and evaluated in courses at every level across the undergraduate curriculum, core competency courses should be completed during the first year of a student's program.

Core Competency Requirements

All students must satisfy core competency requirements in English, oral communication, and mathematics for 0-12 semester hours of general education credit.

The requirements in the core competencies may be met by successfully completing the designated course, by transfer credit, by passing a competency examination, or, for some core competencies, through credit by examination. (See "Credit by Examination.") Although passing a competency examination fulfills the requirement for the core competency, it does not result in the awarding of NIU course credit (i.e., it reduces the required number of general education hours but does not reduce the number of hours required for a degree.) Students with strong academic credentials are encouraged to attempt the competency examinations. Information on competency examinations is available from the Office of Testing Services.

The specific ways to satisfy the core competency requirements are listed below.

The English core competency requirement can be satisfied by

- obtaining a grade of C or better in ENGL 103 and ENGL 104, or
- obtaining a grade of C or better in ENGL 105, or
- obtaining equivalent transfer credit, or
- passing the English Core Competency II Examination, or
- obtaining credit for ENGL 103 and ENGL 104 through credit by examination (Advanced Placement)

The oral communication core competency requirement can be satisfied by

- passing COMS 100, or
- obtaining equivalent transfer credit, or
- passing the Oral Communication Core Competency Examination

The mathematics core competency requirement can be satisfied by

- passing MATH 101, or
- obtaining a grade of C or better in MATH 155, MATH 201, MATH 206, MATH 210, MATH 211, or MATH 229, or
- obtaining credit for one of the mathematics courses listed above, except MATH 101, through credit by examination (Advanced Placement), or
- obtaining a grade of C or better in STAT 208, STAT 301, STAT 350, ISYE 335, or UBUS 223; and obtaining
  - a grade of C or better in MATH 110, or
  - an ACT mathematics score of at least 24, or
  - an SAT mathematics score of at least 560, or
  - an A- or B-level placement on the mathematics placement examination
- (If STAT 208 is used in the manner described above to fulfill the mathematics core competency requirement, then it cannot also be used in the sciences and mathematics area of distributive studies), or
- obtaining equivalent transfer credit, or
- passing the Mathematics Core Competency Examination.

Enrollment in courses offered at NIU which fulfill NIU's core competency requirement in mathematics requires an entry-skill level, determined through placement testing and/or explicit prerequisites, at least equal to that expected from the successful completion of an intermediate algebra course. Such a course is not offered by NIU.[1]

Core Competency Course Descriptions

COMS 100. FUNDAMENTALS OF ORAL COMMUNICATION (3). Listening and speaking competencies with focus on skills of invention, organization, language and style, and delivery in public and other settings. Does not count for credit toward the major in communication studies.

ENGL 103. RHETORIC AND COMPOSITION I (3). Writing and revising expressive, expository, and persuasive essays accompanied by the reading of nonfiction prose. Weekly writing assignments. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement.

ENGL 104. RHETORIC AND COMPOSITION II (3). Writing and revising argumentative and analytical essays accompanied by the critical reading of various forms of writing. Documented writing required in all sections. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement. PRQ: ENGL 103 with a grade of C or better.

ENGL 105. RHETORIC AND COMPOSITION (3). Concentrated rhetorical approach to the writing and revising of expressive, expository, and persuasive essays accompanied by the critical reading of various forms of writing. Documented writing required in all sections. Students with credit for ENGL 105 may not take ENGL 103 or ENGL 104. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement. PRQ: Placement only through English Core Competency Examination

MATH 101. CORE COMPETENCY IN MATHEMATICS (3). Mastery of elementary skills and facts, understanding of logically correct arguments, abstract thinking, and problem solving ability. Not intended as preparation for MATH 110 or for courses numbered above MATH 110. Not available for credit to students who have previously received credit with a grade of C or better in a MATH course numbered above 110 except MATH 201. Not open for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: Intermediate algebra and geometry.

MATH 155. TRIGONOMETRY AND ELEMENTARY FUNCTIONS (3). Polynomials and rational functions, review of exponential and logarithmic functions, trigonometry, and complex numbers. Does not count for credit toward the major or minor in mathematical sciences. Not open for credit to students who have obtained a grade of C or better in MATH 229. PRQ: MATH 110 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

MATH 201. FOUNDATIONS OF ELEMENTARY SCHOOL MATHEMATICS (3). Introduction to sets, geometry, measurement, logic, structure of mathematical systems, and the real number system. Open for credit only toward the majors in early childhood studies, elementary education, and special education. Does not count for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: One year of high school algebra and one year of high school geometry.

MATH 206. INTRODUCTORY DISCRETE MATHEMATICS (3). Introduction to sets, algorithms, induction, recursion, relations, graphs, trees, and algebraic structure, with applications, many of which are in computer science. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 110 or satisfactory performance on the Mathematics Placement Examination.

MATH 210. FINITE MATHEMATICS (3). Introduction to mathematical topics with applications to business, social science, and other fields. Includes such topics as functions and graphs, matrix algebra and solutions of systems of linear equations, inequalities and linear programming, elementary combinatorics, and probability. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: One year of high school algebra, one year of high school geometry, and satisfactory performance on the Mathematics Placement Examination or MATH 110 with a grade of C or better.

MATH 211. CALCULUS FOR BUSINESS AND SOCIAL SCIENCE (3). An elementary treatment of topics from differential and integral calculus, with applications in social science and business. Except with departmental approval students may not receive credit for both MATH 211 and MATH 229. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 110 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

MATH 229. CALCULUS I (4). A first course in calculus. Except with departmental approval, students may not receive credit for both MATH 211 and MATH 229. PRQ: MATH 155 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

[1]However, an intermediate algebra course offered by Kishwaukee College can be taken on the NIU campus.

Distributive Studies Area Requirements and Course Descriptions

The required minimum of 29 semester hours in the distributive studies areas (humanities and the arts, sciences and mathematics, social sciences, and interdisciplinary studies) will help students attain a sound liberal education and acquire sufficient general knowledge and intellectual versatility to enable them to become informed and resourceful members of society. Therefore, students will be introduced to widely varied modes of thinking and points of view in courses which develop the intellectual processes, perspectives, and methodologies implicit in each discipline. The course work in distributive studies will expand the student's awareness of human thought and relations conducive to the understanding and appreciation of cultural heritage. It will also give an appreciation of the scientific method of inquiry, engage the student in an analysis of scientific facts and principles pertaining to the physical, biological, social, and cultural world, and impart an understanding of their implications for human welfare.

Distributive Studies Area Requirements

All students must satisfactorily complete the following requirements in the distributive studies areas.

Humanities and the arts (9-12)

Students must earn from 9 to 12 semester hours in the humanities and the arts area with at least one course taken in the College of Liberal Arts and Sciences and at least one course taken in the College of Visual and Performing Arts, with no more than 6 semester hours taken in any one department.

Sciences and mathematics (7-11)

Students must earn from 7 to 11 semester hours in the sciences and mathematics area in courses taken in at least two but no more than three departments.

Social sciences (6-9)

Students must earn from 6 to 9 semester hours in the social sciences area with no more than 6 semester hours taken in any one department.

Interdisciplinary studies (3-6)

Students must earn 3 to 6 semester hours in the interdisciplinary studies area.

The required minimum of 29 semester hours in distributive studies courses cannot include more than three courses in any one department.

Students are not permitted to count a course in their major department for fulfillment of distributive studies area requirements unless they are completing a second major. (This provision does not include a second emphasis within the same major department.) However, majors in the Department of Foreign Languages and Literatures may take FLCL 271, FLFR 371 (except French majors), FLIT 272, and FLRU 261 (except Russian majors) for general education credit.

Individual departments may impose additional restrictions on the courses that their majors may apply to general education requirements. These are described in the departmental sections of this catalog.

The requirements in the distributive studies area may be met by successfully completing the designated courses, by transfer credit, or, for some distributive studies courses, through credit by examination. (See "Credit by Examination.") Credit for all 100- and 200-level general education courses in the distributive studies area may be earned through credit by examination. For more information, contact the department offering the course.

Distributive Studies Area Course Descriptions

Humanities and the Arts (9-12)

The designators ANTH, COMS, ENGL, FLCL, FLFR, FLIT, FLRU, HIST, and PHIL are for courses in the College of Liberal Arts and Sciences. Courses with designators beginning with FL are credited in the Department of Foreign Languages and Literatures.

The designators ARTH, MUSC, THEA, and TH-D are for courses in the College of Visual and Performing Arts. Courses with designators beginning with TH are credited in the School of Theatre and Dance.

ANTH 102. RISE OF CIVILIZATION (3). Forces leading to the emergence of early civilizations in the Near East, Egypt, China, Mesoamerica, and South America. Aspirations, problems, and needs addressed in the art, literature, history, and other enduring contributions of the pristine civilizations of antiquity. Examination of ancient achievements and values from humanistic and artistic perspectives.

ARTH 282. INTRODUCTION TO THE VISUAL ARTS (3). Development of an understanding of the visual arts through a study of various art media and their cultural backgrounds. Course will not count for credit toward a major or minor in art.

ARTH 291. ART HISTORY SURVEY I: TO 1150 (3). Art and architecture from prehistoric times through the Romanesque period.

ARTH 292. ART HISTORY SURVEY II: 1150-1700 (3). Art and architecture from the Early Gothic period through the 17th century.

ARTH 293. ART HISTORY SURVEY III: FROM 1700 (3). Art and architecture from the 18th century to the present.

ARTH 294. ART HISTORY SURVEY IV: ARTS OF THE EAST (3). Arts of the Middle East, Far East, and Southeast Asia.

ARTH 378. INDIAN AND SOUTHEAST ASIAN ART (3). Art and architecture of Hindu and Buddhist cultures.

ARTH 385. PRE-COLUMBIAN ART (3). Art and architecture of ancient Mesoamerica and Peru.

ARTH 388B. ANCIENT ART II: CLASSICAL ART (3). Art and architecture of Classical Greece from the Geometric period to the end of the Hellenistic.

ARTH 395. 19TH CENTURY ART (3). Art and architecture from the French Revolution to ca. 1900.

ARTH 396. ITALIAN HIGH RENAISSANCE ART (3). Art and architecture of the High Renaissance in Italy.

COMS 220. RHETORIC AND PUBLIC ISSUES (3). Role of public discourse and persuasive campaigns in selecting, structuring, and presenting versions of reality. Nature and impact of rhetoric in public controversy. Emphasis on rhetorical criticism of advocacy on controversial matters of public policy through critical analysis of speeches, debates, editorials, argumentative essays, and political and social changes. Not available for credit to students with credit in COMS 210.

COMS 230. RHETORIC AND THE MEDIA (3). Role of media messages in selecting, structuring, and presenting versions of reality. Effects on individuals and society. Not available for credit to students with credit in COMS 151.

COMS 240. RHETORIC OF INTERPERSONAL COMMUNICATION (3). How interpersonal communication constructs our sense of self, determines the quality of enduring relationships with family, colleagues, and friends, and influences decisions about social responsibility and action.

COMS 356. CRITICAL INTERPRETATION OF FILM/TELEVISION (3). Influences of aesthetics, genre, mode of production, visual grammar, and individual artistic vision on the rhetorical interpretation of film. Selected masterpieces viewed and analyzed.

COMS 410. COMMUNICATION AND GENDER (3). Relationships among communication, gender, and culture through a variety of theoretical and critical perspectives. Examination of research on verbal and nonverbal aspects of communication as they interact with gender in contexts such as interpersonal, organizational, political, and media.

ENGL 110. EXPERIENCE OF FICTION (3). Close reading for the appreciation of fiction as an embodiment of human and cultural values. Not available for credit to students with credit in ENGL 202.

ENGL 115. MASTERPIECES OF BRITISH LITERATURE (3). Fiction, poetry, and drama from the major periods of British literature read for understanding and appreciation. Not available for credit to students with credit in ENGL 210.

ENGL 116. MASTERPIECES OF AMERICAN LITERATURE (3). Fiction, poetry, and drama from the major periods of American literature read for understanding and appreciation. Not available for credit to students with credit in ENGL 280.

ENGL 310. LITERARY CLASSICS (3). Selected works, from ancient to modern, such as Plato's Symposium, Ovid's Metamorphoses, Montaigne's Essays, Pushkin's Eugene Onegin, and Camus's The Plague, read in translation and with attention to theme, technique, genre, and context.

ENGL 315. SHAKESPEARE (3). Representative plays. Intended to prepare the general student to read and view the plays independently. Not available for credit in the major.

FLCL 271. CLASSICAL MYTHOLOGY (3). Study of gods and heroes of ancient Greece and Rome.

FLFR 371. MASTERPIECES OF FRENCH LITERATURE IN TRANSLATION (3). Study of masterpieces of French literature in translation from the Middle Ages to the modern period with emphasis on their social and cultural context; introduction to critical analysis.

FLIT 272. THE ITALIAN RENAISSANCE (3). Birth of humanism and its contribution to Western thought through the literature of Italy during the Renaissance. Some attention given to painting, sculpture, and music. No knowledge of Italian required.

FLRU 261. RUSSIAN CULTURE AND LITERATURE (3). Comprehensive introduction to ancient and modern Russian culture and literature as a major part of Western civilization. Taught in English.

HIST 110. WESTERN CIVILIZATION TO 1500 (3). Examination and interpretation of major historical developments in the Ancient Near East, Classical Greece and Rome, and Medieval Europe.

HIST 111. WESTERN CIVILIZATION: 1500-1815 (3). Examination and interpretation of the major historical changes which took place in Europe between the time of the Renaissance and the Age of the French Revolution.

HIST 112. WESTERN CIVILIZATION SINCE 1815 (3). Examination and interpretation of the European historical developments since the French Revolution which have molded the world as we know it today.

HIST 140. ASIA TO 1500 (3). Political and cultural history of India, China, and Japan with discussion of the origins, development, and importance of major Asian religions. May not be taken pass/fail.

HIST 141. ASIA SINCE 1500 (3). Major developments in Asia since the arrival of the Europeans, with emphasis on the changes in Asian civilizations resulting from European technology, political ideas, and economic relations. May not be taken pass/fail.

HIST 171. THE WORLD SINCE 1500 (3). The human community in an era of global integration. Impact of industrialization and imperialism, migration of populations and capital, and revolutionary changes resulting from the dissemination of ideologies, diseases, weapons, and advanced forms of transportation and communication throughout the world. Instructor emphasis on particular themes and parts of the world to illustrate global trends in accordance with individual expertise and interests.

HIST 260. AMERICAN HISTORY TO 1865 (3). Central developments in American history from Old World backgrounds through the Civil War.

HIST 261. AMERICAN HISTORY SINCE 1865 (3). Central developments in the history of the United States since the end of the Civil War.

HIST 377. AMERICAN ENVIRONMENTAL HISTORY (3). History of the ecosystems of the United States, 1600 to the present, and of the 20th century conservation and environmental movements. Topics include Indian ecology, farming and ecology, and the urban environment.

MUSC 220. INTRODUCTION TO MUSIC (3). To broaden the non-music major's understanding of music as a subject related to other arts and sciences. Classwork is divided broadly into two activities: study of music fundamentals, rhythmic structure, and form; and listening lessons arranged to illustrate the evolution of music. Not open to music majors.

PHIL 101. INTRODUCTION TO PHILOSOPHY (3). Reading and discussion of several major philosophical issues. These may include the possibility and limits of human knowledge, the meaning of human existence, the nature of morality, the existence of God, and the significance of religious experience. Analysis of original works of such philosophers as Plato, Aristotle, Descartes, Hume, Kant, Mill, and Sartre. Emphasis on understanding philosophical theories and using the techniques of philosophical reasoning.

PHIL 105. CRITICAL REASONING (3). Introduction to basic principles of rational argument evaluation in everyday life. Topics may include deductive reasoning, informal fallacies, statistical and probabilistic reasoning, causal inference, rational decision making, scientific reasoning, and the nature of evidence and proof. Emphasis on sharpening students' abilities to evaluate arguments. Students may not receive credit for both PHIL 103 and PHIL 105.

PHIL 170. WORLD RELIGIONS (3). Survey of the philosophical and theological foundations of the major religions of the world. Consideration of such religions as Christianity, Judaism, Buddhism, Taoism, Islam, and Hinduism in the light of their own religious writings as well as critical and comparative examinations of their meaning and significance.

PHIL 205. SYMBOLIC LOGIC (3). Introduction to formal logic, including propositional and quantificational logic. Emphasis on formal and semantic proof techniques and their applications to deductive reasoning in natural language. Students may not receive credit for both PHIL 205 and PHIL 302.

PHIL 231. CONTEMPORARY MORAL ISSUES (3). Consideration of a number of major moral issues such as abortion, animal ethics, capital punishment, civil disobedience, economic justice, environmental ethics, euthanasia, human rights, nationalism, racial or sexual discrimination, sexual conduct, terrorism, and war.

PHIL 342. PHILOSOPHY OF THE ARTS (3). Critical study of theories of art and related problems. Consideration of such topics as the structure of aesthetic experience, the meaning of works of art, the forms and elements of expression in the various arts, and the principles of art and literary criticism.

PHIL 361. SOCIAL AND POLITICAL PHILOSOPHY (3). Examination of the nature and justification of social practices and political institutions. Topics may include the philosophical bases of democracy and alternative political systems; social justice and political autonomy in an age of globalization; war and terrorism; and variants of multiculturalism, environmentalism, communitarianism, and fundamentalism.

PHIL 370. PHILOSOPHY OF RELIGION (3). Critical examination of the various aspects of religious experience and of related theological concepts and theories. Discussion of such topics as the relationship between myth and religion, the structure of worship, the significance of God's existence, and the relevance of modern science to religious belief.

THEA 203. INTRODUCTION TO THEATRE (3). Role of theatre as a major fine art and a communicator of ideas, human understanding, and cultural values. Contributions of playwright, actor, director, designer, technician, and audience to the theatrical production. Assessment of the principles and functions of theatre arts in its diverse performance media. Theatre attendance required. Not open to theatre arts majors or minors.

TH-D 222. DANCE AND THE FINE ARTS (3). Aesthetic considerations of dance as a fine art. The study of the theory and philosophy of dance as related to music, theatre and the visual arts. Not open to theatre arts majors or minors.

Sciences and Mathematics

General education credits for STAT 208 is credited in the Department of Mathematical Sciences.

ANTH 240. GENERAL PHYSICAL ANTHROPOLOGY (3). Outline of the principles and subject matter of human evolutionary history, race formation and classification, genetics, evolutionary theory, and interrelations between cultural and physical anthropology.

BIOS 103. GENERAL BIOLOGY (3). Basic chemistry, chemistry of living systems, cell structure and function, energetics, classical and molecular genetics, information flow, reproduction, evolution and

diversity of life, and ecology. Not available for credit for majors in biological sciences or to students with previous credit in BIOS 104 (or its equivalent).

BIOS 104. GENERAL BIOLOGY (4). Chemistry of living systems, cell structure and function, energetics, classical and molecular genetics, information flow, reproduction, evolution and diversity of life, and ecology. Laboratory experience included. Not available for credit for majors in biological sciences or to students with previous credit in BIOS 103 or its equivalent. PRQ: One semester of college chemistry.

BIOS 106. ENVIRONMENTAL BIOLOGY (3). Biological basis of environmental science and human influence on the ecosystem. Emphasis on the biological relations among natural resources, pollution, and human population dynamics. Not open for credit for majors in biological sciences.

BIOS 109. HUMAN BIOLOGY (3). Includes evolution, ecology, physiological regulation, nutrition, genetics, immune responses, reproduction, development, aging, and cancer. Not open for credit for majors in biological sciences.

CHEM 110. CHEMISTRY (3). Development of the fundamental principles and concepts of chemistry by lecture-demonstration, as well as the development of an appreciation of the nature of chemistry as a science. An historical development of the most important concepts and ideas. Methods and limitations of chemistry, its evolution and discussions of the problems currently being solved and created. Three hours of lecture per week. Not available for credit for students with previous credit in CHEM 210.

CHEM 111. CHEMISTRY LABORATORY (1). Designed to accompany CHEM 110. One 3-hour period a week. CRQ: CHEM 110.

CHEM 211T. GENERAL CHEMISTRY II (3). Continuation of CHEM 210T. Kinetics, equilibria, thermodynamics, electrochemistry; descriptive chemistry of the elements. Three lectures and one recitation per week. Not available for credit to students with credit in CHEM 211. PRQ: CHEM 210T and CHEM 212. CRQ: CHEM 213.

CHEM 212. GENERAL CHEMISTRY LABORATORY I(1). Designed to accompany CHEM 210T. One 3-hour period per week. Not available for credit to students with credit in CHEM 210. CRQ: CHEM 210T.

CHEM 213. GENERAL CHEMISTRY LABORATORY II (1). Designed to accompany CHEM 211T. One 3-hour period per week. Not available for credit to students with credit in CHEM 211. CRQ: CHEM 211T.

CSCI 205. INTRODUCTION TO COMPUTING (3). Introduction to computers, computer science, and programming techniques. Not available for credit toward the major in computer science or for students with prior credit in CSCI 210, CSCI 230, CSCI 240, CSCI 250, or OMIS 259. PRQ: MATH 110 or consent of department.

ELE 100. ELEMENTS OF ELECTRONICS (3). Basic principles used to explain the operation of electrical and electronic devices such as radios, stereos, televisions, radars, computers, microwave ovens, and other common electronic equipment.

GEOG 101. SURVEY OF PHYSICAL GEOGRAPHY (3). Elements of the physical environment, with emphasis on hydrology, vegetation, landforms, and soils; processes involved in their interactions, their spatial variations, and interrelationships between these elements and humankind. Three hours of lecture. Not available for credit to students with credit in GEOG 101A.

GEOG 102. SURVEY OF PHYSICAL GEOGRAPHY LABORATORY (1). Selected laboratory experiments to accompany GEOG 101. Two hours of laboratory. CRQ: GEOG 101.

GEOG 105. INTRODUCTION TO THE ATMOSPHERE (3). Introduction to elements of weather and climate with emphasis on the interrelationships between heat, pressure, and moisture including the global radiation balance. Introduction to climate classification, and atmospheric processes that control global climates and climatic change. Three hours of lecture. Not available for credit to students with credit in GEOG 105A.

GEOG 106. INTRODUCTION TO THE ATMOSPHERE LABORATORY (1). Selected laboratory experiments to accompany GEOG 105. Two hours of laboratory. CRQ: GEOG 105.

GEOL 103. PLANETARY AND SPACE SCIENCE (3). Exploration of the bodies of our solar system, specifically, what recent probes reveal about the origin, evolution, and interaction of planetary interiors, surfaces, and atmospheres, and their implications for our understanding of the Earth, further space exploration, and the search for extraterrestrial life.

GEOL 104. INTRODUCTION TO OCEAN SCIENCE (3). Use of the basic sciences in an examination of the use and abuse of the ocean environment, including food and mineral resource exploitation, pollution, coastal development and global climate change. Evaluation of likely outcomes from human impacts on the ocean environment in the context of a basic understanding of ocean processes.

GEOL 105. ENVIRONMENTAL GEOLOGY (3). Exploration of both constraints imposed by geology on human activities and human impacts on natural processes. Includes fundamental geologic processes and associated hazards (for example, earthquakes, volcanic eruptions, flooding, landslides); occurrence and availability of geologic resources (energy, minerals, water); and topics such as pollution, waste disposal, and land-use planning viewed from a geologic perspective.

GEOL 120. INTRODUCTORY GEOLOGY (3). Exploration of the diverse processes that continually shape our physical environment. Develops an understanding of earth materials, how the earth works, the causes of natural disasters, and the overriding importance of geologic time. Includes minerals, rocks, volcanoes, radioactive dating, earthquakes, plate tectonics, rivers and floods, ground water resources, and glaciers. For a more comprehensive understanding of the subject, concurrent registration in GEOL 121 is strongly recommended.

GEOL 121. INTRODUCTORY GEOLOGY LABORATORY (1). Laboratory experience with individual exploration of topics and subjects best presented in a hands-on environment. CRQ: GEOL 120.

ISYE 100. FUNDAMENTALS OF MANUFACTURING SYSTEMS (3). Basic elements of the entire manufacturing process including product conception, basic manufacturing operations, production processes, computer integration and automation, robotics, materials, planning and control of production systems, human factors, quality control, product support, and environmental aspects. Case studies of modern manufacturing systems emphasizing the latest technology, productivity, design for manufacture, concurrent engineering, and quality. Demonstration of machining processes and a computer-integrated manufacturing (CIM) line.

MATH 229. CALCULUS I (4). A first course in calculus. Except with departmental approval, students may not receive credit for both MATH 211 and MATH 229. PRQ: MATH 155 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

230. CALCULUS II (4). Continuation of MATH 229. Techniques of integration and applications of integrals, transcendental functions, and applications of series. PRQ: MATH 229 with a grade of C or better.

PHIL 205. SYMBOLIC LOGIC (3). Introduction to formal logic, including propositional and quantificational logic. Emphasis on formal and semantic proof techniques and their applications to deductive reasoning in natural language. Students may not receive credit for both PHIL 205 and PHIL 302.

150. PHYSICS (3). Development of concepts and principles from selected topics in mechanics, electricity, heat, sound, and light. Application to everyday life. Not recommended for students who have had a year of high school physics. Not available for credit to students with credit in PHYS 150A.

150A. PHYSICS (4). Development of concepts and principles from selected topics in mechanics, electricity, heat, sound, and light. Application to everyday life. Not recommended for students who have had a year of high school physics. Not available for credit to students with credit in PHYS 150. Three hours of lecture and two hours of laboratory per week.

PHYS 162. ELEMENTARY ASTRONOMY (3). Introduction to astronomical science extending from planetary astronomy through the most recent discoveries and speculations of astrophysics, such as pulsars, “black holes” and the latest hypotheses regarding stellar evolution and cosmology.

PHYS 180. ACOUSTICS, MUSIC, AND HEARING (3). Elementary study of acoustics designed especially for students with an interest in music, speech and hearing, the theatre, or sound recording. Topics include the waves and vibrations, perception and measurement of sound, acoustics of musical instruments, speech and singing, and the acoustics of rooms.

PHYS 210. GENERAL PHYSICS I (4). First semester of a two-semester sequence covering mechanics, heat, and sound. Includes lecture and laboratory sessions. Not available for credit to students with credit in PHYS 250, PHYS 250A, or PHYS 253. PRQ: MATH 155 or equivalent.

PHYS 211. GENERAL PHYSICS II (4). Second semester of a two-semester sequence covering electricity and magnetism, light and quantum physics. Includes lecture and laboratory sessions. Not available for credit to students with credit in PHYS 251, PHYS 251A, or PHYS 273. PRQ: PHYS 210 or PHYS 250 or PHYS 250A or PHYS 253.

PHYS 253. FUNDAMENTALS OF PHYSICS I: MECHANICS (4). Physical laws governing motion, force, energy, rotation, and vibration using calculus. Primarily for majors in the physical and mathematical sciences and engineering. One three-hour laboratory a week. Not available for credit to students with credit in PHYS 210, PHYS 250, or PHYS 250A. CRQ: MATH 229.

PHYS 273. FUNDAMENTALS OF PHYSICS II: ELECTROMAGNETISM (4). Physical laws governing electricity and magnetism using calculus. Primarily for majors in the physical and mathematical sciences and engineering. One three-hour laboratory a week. Not available for credit to students with credit in PHYS 211, PHYS 251, or PHYS 251A. PRQ: PHYS 250A or PHYS 253. CRQ: MATH 230.

STAT 208. BASIC STATISTICS (3). Designed to provide students with an understanding of reasoning involved in the statistician's approach to a variety of problems. Not open for credit toward the major or minor in mathematical sciences. Not open for credit to students with credit in an upper-division statistics course or in OMIS 324 or UBUS 223. Not used in major or minor GPA calculation for mathematical sciences majors or minors.

Social Sciences

ANTH 120. ANTHROPOLOGY AND HUMAN DIVERSITY (3). Survey of human cultural diversity throughout the world. Anthropological approaches to understanding multiculturalism. Examination of factors underlying human diversity.

ANTH 210. EXPLORING ARCHAEOLOGY (3). Survey of the basic concepts and principles employed by archaeologists as cultural anthropologists with illustrations from world prehistory.

ANTH 220. INTRODUCTION TO CULTURAL ANTHROPOLOGY (3). The concept of culture; its origin, development, and diversity. Culture as an adaptive mechanism. Theory and method of cultural anthropology applied to the analysis of selected cultures.

ANTH 230. ANTHROPOLOGY OF LANGUAGE (3). Nature and function of language; anthropological motivations for the study of language; contributions of anthropological linguistics; distribution and relationships of languages of the world.

ECON 160. CONTEMPORARY ECONOMIC ISSUES (3). Economic approach to analysis of problems such as poverty, crime, unemployment, and inflation. Insights and evaluation of policy proposals. Not open for credit toward the major or minor in economics.

ECON 260. PRINCIPLES OF MICROECONOMICS (3). Introductory study of market and non-market mechanisms in the allocation of productive resources and in the distribution of income. Includes the study of monopolies, oligopolies, and labor unions as well as applications to selected current economic problems. Sophomore standing recommended unless student is majoring or minoring in economics.

ECON 261. PRINCIPLES OF MACROECONOMICS (3). Introductory study of factors determining aggregate income, employment, and general price level. Such factors include roles of government, the banking system, and international monetary relations. Sophomore standing recommended unless student is majoring or minoring in economics.

FCNS 230. CHILD DEVELOPMENT (3). Understanding of developmental principles of children under 8 years of age. Includes observation. CRQ: PSYC 102.

GEOG 202. WORLD REGIONAL GEOGRAPHY (3). Geographic analysis of the nations and regions of the world, emphasizing their economic, political, and social organization. Attention given to contemporary problems.

GEOG 204. GEOGRAPHY OF ECONOMIC ACTIVITIES (3). A global system approach to understanding the economic interdependence among people, regions, and nations.

GEOG 253. ENVIRONMENT AND SOCIETY (3). Introduction to the study of human-environment interactions from a geographic perspective, with emphasis on the role of humans in changing the face of the earth. Fundamentals of environmental science as well as global and local issues related to human population growth, agriculture, water resources, biodiversity, forest resources, energy use, climate change, and environmental health.

HIST 381. COLONIAL LATIN AMERICA (3). Spanish and Portuguese colonial empires in America from their foundation through the wars for Latin American independence.

HIST 382. MODERN LATIN AMERICA (3). The Latin American states from the wars of independence to the present. Political, economic, and social institutions examined with attention to patterns of Latin American government.

POLS 100. AMERICAN GOVERNMENT AND POLITICS (3). Principles, processes, and problems of American government and politics. Examines the impact of changes in contemporary American politics.

POLS 150. DEMOCRACY IN AMERICA (3). American democracy studied through the speeches and writings of political leaders involved in founding, preserving, and changing American politics and society. Emphasis on both democratic institutions and continuing problems of liberty and equality. The Federalist Papers and Tocqueville's Democracy in America are standard texts.

POLS 220. INTRODUCTION TO PUBLIC POLICY (3). Factors important in the policy process through an examination of selected issue areas such as health, the environment, energy, and economic regulation. Politics of evaluation and its uses.

POLS 260. INTRODUCTION TO COMPARATIVE POLITICS (3). Comparative analysis of values, structures, and processes of selected foreign political systems, noting similarities to and differences from those of the United States.

PSYC 102. INTRODUCTION TO PSYCHOLOGY (3). Basic psycho-physiological principles of human behavior, including the roles of heredity, maturation, environment, behavioral development, sensory processes, perception, motivation, and emotions.

PSYC 225. LIFESPAN DEVELOPMENT: CHILDHOOD THROUGH ADULTHOOD (3). Behavioral development from conception through adulthood. Emphasis on biological, motor, cognitive, social, and personality characteristics at various stages of development. PRQ: PSYC 102.

SOCI 170. INTRODUCTION TO SOCIOLOGY (3). Basic survey of major substantive areas within sociology including key contributions to our understanding of the complex social world. Concepts and methods used by sociologists.

SOCI 250. CONTEMPORARY SOCIAL INSTITUTIONS (3). Examination of the continuity, interrelationships, and change in social organization and institutions in American and other societies.

SOCI 260. INTRODUCTION TO SOCIAL PSYCHOLOGY (3). How people are socialized in terms of the norms and values of their societies and how norms and values influence societal change. Introduces students to the basic research and methods of social psychological inquiry.

SOCI 270. SOCIAL PROBLEMS (3). Why social problems occur and how society can work toward correcting them. Exploration of how different value premises and social theories lead to distinctive ways of addressing social problems. Issues such as poverty, crime, homelessness, intergroup conflicts, and sexual identity discrimination provide case materials for these explorations. Use of this approach to examine underlying structural problems such as economic restructuring, the overall health and aging of the population, and urban change and decline.

Interdisciplinary Studies

AHP 201. SOCIAL AND INDIVIDUAL PATTERNS OF DRUG USE (3). Historic and cross-cultural use of drugs, pharmacology, and the effects of drug use and addiction on individuals and social systems.

AHP 206. CONTEMPORARY HEALTH CONCEPTS (3). Investigation of the complexities of health issues related to lifestyles and the subsequent impact on the family, community, and a pluralistic society at large. Examination of aspects of biomedical and psychosocial theories and practice.

AHP 295. ECOLOGY OF HEALTH (3). Presentation of a conceptual model of health including psychosocial, socioeconomic, sociocultural, and environmental components. Overview of the U.S. health care system and introduction to concepts of public health promotion.

ANTH 101. HUMAN ORIGINS (3). Approaches to the study of human physical origins and early cultural development. Analysis of the fossil record of humans and differentiation into modern populations. The origin of major stone tool traditions. Examination of early cultural developments such as art, agriculture, city life, and ancient states.

ATHH 288. MODERN ART AND FILM (3). Development of and interaction between the visual arts and the cinematic arts within the context of modern art history.

BIOS 101. PLANT PRODUCTS AND HUMAN AFFAIRS (3). Includes basic botany and the geographic origins of economically important plants which produce products used by various peoples worldwide. Emphasis on plant products having an influence on societies (cereal crops, medicines, drugs, etc.). Does not count for credit toward the major in biological sciences.

COMD 200. DISABILITY IN SOCIETY (3). Overview of disability from personal, philosophical, sociological, psychological, medical, and legal perspectives. Emphasis on understanding disability within a minority-group model as defined by shared experiences of stigmatization and oppression.

EPFE 201. EDUCATION AS AN AGENT FOR CHANGE (3). Study of the complex problems facing educational and other institutions in our multicultural or pluralistic communities and the role of education as an agent for change.

FCNS 207. THE CONSUMER (3). Role of family members as consumers; influence of values and goals upon consumption practices; information and protection for the consumer

FCNS 280. HUMAN DEVELOPMENT, THE FAMILY, AND SOCIETY (3). Survey of human growth and development from conception to death with emphasis on interaction and socialization processes. CRQ: PSYC 102.

FCNS 406. GLOBAL FOOD AND NUTRITION ISSUES (3). Interdisciplinary study of issues related to hunger and malnutrition in the world setting; causes of food crises in less developed nations, as well as in technologically advanced countries. PRQ: BIOS 103, BIOS 104, or BIOS 109 and ANTH 120 or SOCI 170 or equivalent.

HIST 323. HISTORY OF SCIENCE TO NEWTON (3). Science in the ancient Near East; Hellenic and Hellenistic science; the Arabs; medieval science; the Copernican revolution; the new physics; and the new biology. PRQ: At least sophomore standing.

IDSP 200. RACISM IN AMERICAN CULTURE AND SOCIETY (3). Examination of the forces that consciously and unconsciously engendered racism in American society and the effect of racism not only on the victims but also on those perpetuating it. The social cost of racism and possible solutions.

IDSP 211. EDUCATING FOR CULTURAL SENSITIVITY (3). Analytical look at student's own ethnic and cultural background, and the ethnic and cultural background of others. Emphasis on surveying materials related to life experiences of ethnics in the United States. Systematic look at the education system and how it has responded to the needs of various ethnic groups.

IDSP 219. INTRODUCTION TO AFRICAN STUDIES (3). Introduction to the African continent: its art and cultures, social and educational structures, history, economic development, political dynamics, and current crises.

IDSP 225. INTRODUCTION TO MEDIEVAL SOCIETY AND CULTURE (3). Interdisciplinary orientation and introduction to medieval studies including study of different cultural forms (literature, music, art, philosophy, science, and religion) and the "way of life" of different strata of society.

ILAS 225. SOUTHEAST ASIA: CROSSROADS OF THE WORLD (3). Interdisciplinary introduction to the varied cultures of Southeast Asia focused on the general theme of unity within diversity. Examination of the linkage of Southeast Asian art, music, dance, literature, and architecture with other segments of the Buddhist, Islamic, Christian, and animistic societies of the region.

ILAS 261. LANGUAGE, MIND, AND THOUGHT (3). Functioning of the human mind from the perspectives of anthropology, computer science, linguistics, neuroscience, philosophy, and psychology. Interdisciplinary consideration of perception, language, reasoning, artificial intelligence, culture, and models of cognition.

JOUR 150. INTRODUCTION TO MASS COMMUNICATION (3). Examination of the evolution and effects of mass communication, including television, radio, and newspapers. A critical perspective on functions and dysfunctions of mass media as social institutions, including effects on public morals, tastes, and issues.

KNPE 100. SCIENTIFIC BASIS OF HUMAN ACTIVITY (3). Aspects of physical activity–biological, mechanical, physiological, nutritional, and psychological–with laboratory experiences to further students' understanding of these areas.

KNPE 111. SPORT: CULTURE AND SOCIETY (3). Examination of interaction between sport and culture; impact of sport on United States society; and social processes which influence sport.

MEE 200. ENERGY AND THE ENVIRONMENT (3). Development and current status of energy sources, technologies, consumption patterns, conservation, and energy policies. Emphasis on environmental effects of various choices made at each step of the energy cycle, and examination of those choices from technological and socioeconomical points of view. PRQ: PHYS 150 or CHEM 110.

PHIL 352. PHILOSOPHY OF SCIENCE (3). Study of the central philosophical problems raised by science, such as those concerning the nature of explanation, concept formation, realism and instrumentalism, and the nature of scientific progress. Designed for students interested in the sciences as well as for students interested in problems in the philosophy of science.

PSYC 245. THINKING (3). The phenomenon of thinking with emphasis on psychological theories and empirical findings related to memory, problem solving, decision making, and reasoning. Classroom demonstrations and exercises to illustrate principles and help students to improve their critical thinking skills. PRQ: PSYC 102.

TECH 294. TECHNOLOGY AND CULTURAL RELEVANCE (3). Development and current status of technology with attention given to developing an understanding of technology as it relates to its various settings and assumptions. Critical examination of these assumptions with an effort at organizing facts and developing meanings of technology in a dynamic society. Technology majors cannot use TECH 294 as a TECH Elective or for general education credit.

WOMS 230. WOMEN IN CONTEMPORARY AMERICA (3). Multidisciplinary analysis of maturational and social issues facing American females.

WOMS 235. WOMEN ACROSS CULTURES AND CENTURIES (3). The dominant cultural patterns affecting women in different historical periods and social settings, and their expression in literature.

General Education Course Titles

Core Competencies

COMS 100 - Fundamentals of Oral Communication (3)
ENGL 103 - Rhetoric and Composition I (3)
ENGL 104 - Rhetoric and Composition II (3)
ENGL 105 - Rhetoric and Composition (3)
MATH 101 - Core Competency in Mathematics (3)
MATH 155 - Trigonometry and Elementary Functions (3)
MATH 201 - Foundations of Elementary School Mathematics (3)
MATH 206 - Introductory Discrete Mathematics (3)
MATH 210 - Finite Mathematics (3)
MATH 211 - Calculus for Business and Social Science (3)
MATH 229 - Calculus I (4)

Distributive Studies

The required minimum of 29 semester hours in distributive studies courses cannot include more than three. courses in any one department

Humanities and the Arts (9-12)

Students must earn from 9 to 12 semester hours in the humanities and the arts area with at least one course taken in the College of Liberal Arts and Sciences and at least one course taken in the College of Visual and Performing Arts, with no more than 6 semester hours taken in any one department.

Courses from the College of Liberal Arts and Sciences

ANTH 102 - Rise of Civilization (3)
COMS 220 - Rhetoric and Public Issues (3)
COMS 230 - Rhetoric and the Media (3)
COMS 240 - Rhetoric of Interpersonal Communication (3)
COMS 356 - Critical Interpretation of Film/Television (3)
COMS 410 - Communication and Gender (3)
ENGL 110 - Experience of Fiction (3)
ENGL 115 - Masterpieces of British Literature (3)
ENGL 116 - Masterpieces of American Literature (3)
ENGL 310 - Literary Classics (3)
ENGL 315 - Shakespeare (3)
FLCL 271 - Classical Mythology (3)
FLFR 371 - Masterpieces of French Literature in Translation (3)
FLIT 272 - The Italian Renaissance (3)
FLRU 261 - Russian Culture and Literature (3)
HIST 110 - Western Civilization to 1500 (3)
HIST 111 - Western Civilization: 1500-1815 (3)
HIST 112 - Western Civilization Since 1815 (3)
HIST 140 - Asia to 1500 (3)
HIST 141 - Asia Since 1500 (3)
HIST 171 - The World Since 1500 (3)
HIST 260 - American History to 1865 (3)
HIST 261 - American History Since 1865 (3)
HIST 377 - American Environmental History (3)
PHIL 101 - Introduction to Philosophy (3)
PHIL 105 - Critical Reasoning (3)
PHIL 170 - World Religions (3)
PHIL 231 - Contemporary Moral Issues (3)
PHIL 342 - Philosophy of the Arts (3)
PHIL 361 - Social and Political Philosophy (3)
PHIL 370 - Philosophy of Religion (3)

Courses from the College of Visual and Performing Arts

ARTH 282 - Introduction to the Visual Arts (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ARTH 294 - Art History Survey IV: Arts of the East (3)
ARTH 378 - Indian and Southeast Asian Art (3)
ARTH 385 - Pre-Columbian Art (3)
ARTH 388B - Ancient Art II: Classical Art (3)
ARTH 395 - 19th Century Art (3)
ARTH 396 - Italian High Renaissance Art (3)
MUSC 220 - Introduction to Music (3)
THEA 203 - Introduction to Theatre (3)
TH-D 222 - Dance and the Fine Arts (3)

Sciences and Mathematics (7-11)

Students must earn from 7 to 11 semester hours in the sciences and mathematics area in courses taken in at least two but no more than three departments. General education credit for STAT 208 is credited in the Department of Mathematical Sciences.

ANTH 240 - General Physical Anthropology (3)
BIOS 103 - General Biology (3)
BIOS 104 - General Biology (4)
BIOS 106 - Environmental Biology (3)
BIOS 109 - Human Biology (3)
CHEM 110 - Chemistry (3)
CHEM 111 - Chemistry Laboratory (1)
CHEM 210T - General Chemistry I (3)
CHEM 211T - General Chemistry II (3)
CHEM 212 - General Chemistry Laboratory I (1)
CHEM 213 - General Chemistry Laboratory II (1)
CSCI 205 - Introduction to Computing (3)
ELE 100 - Elements of Electronics (3)
FCNS 201 - Human Nutrition (3)
GEOG 101 - Survey of Physical Geography (3)
GEOG 102 - Survey of Physical Geography Laboratory (1)
GEOG 105 - Introduction to the Atmosphere (3)
GEOG 106 - Introduction to the Atmosphere Laboratory (1)
GEOL 103 - Planetary and Space Science (3)
GEOL 104 - Introduction to Ocean Science (3)
GEOL 105 - Environmental Geology (3)
GEOL 120 - Introductory Geology (3)
GEOL 121 - Introductory Geology Laboratory (1)
ISYE 100 - Fundamentals of Manufacturing Systems (3)
MATH 229 - Calculus I (4)
PHIL 205 - Symbolic Logic (3)
PHYS 150 - Physics (3)
PHYS 150A - Physics (4)
PHYS 162 - Elementary Astronomy (3)
PHYS 180 - Acoustics, Music, and Hearing (3)
PHYS 210 - General Physics I (4)
PHYS 211 - General Physics II (4)
PHYS 253 - Fundamentals of Physics I: Mechanics (4)
PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
STAT 208 - Basic Statistics (3)

Social Sciences (6-9)

Students must earn from 6 to 9 semester hours in the social sciences area with no more than 6 semester hours taken in any one department.

ANTH 120 - Anthropology and Human Diversity (3)
ANTH 210 - Exploring Archaeology (3)
ANTH 220 - Introduction to Cultural Anthropology (3)
ANTH 230 - Anthropology of Language (3)
ECON 160 - Contemporary Economic Issues (3)
ECON 260 - Principles of Microeconomics (3)
ECON 261 - Principles of Macroeconomics (3)
FCNS 230 - Child Development (3)
GEOG 202 - World Regional Geography (3)
GEOG 204 - Geography of Economic Activities (3)
GEOG 253 - Environment and Society (3)
HIST 381 - Colonial Latin America (3)
HIST 382 - Modern Latin America (3)
POLS 100 - American Government and Politics (3)
POLS 150 - Democracy in America (3)
POLS 220 - Introduction to Public Policy (3)
POLS 260 - Introduction to Comparative Politics (3)
PSYC 102 - Introduction to Psychology (3)
PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
SOCI 170 - Introduction to Sociology (3)
SOCI 250 - Contemporary Social Institutions (3)
SOCI 260 - Introduction to Social Psychology (3)
SOCI 270 - Social Problems (3)

Interdisciplinary Studies (3-6)

Students must earn from 3 to 6 semester hours from the following courses.

AHP 201 - Social and Individual Patterns of Drug Use (3)
AHP 206 - Contemporary Health Concepts (3)
AHP 295 - Ecology of Health (3)
ANTH 101 - Human Origins (3)
ARTH 288 - Modern Art and Film (3)
BIOS 101 - Plant Products and Human Affairs (3)
COMD 200 - Disability in Society (3)
EPFE 201 - Education as an Agent for Change (3)
FCNS 207 - The Consumer (3)
FCNS 280 - Human Development, the Family, and Society (3)
FCNS 406 - Global Food and Nutrition Issues (3)
HIST 323 - History of Science to Newton (3)
IDSP 200 - Racism in American Culture and Society (3)
IDSP 211 - Educating for Cultural Sensitivity (3)
IDSP 219 - Introduction to African Studies (3)
IDSP 225 - Introduction to Medieval Society and Culture (3)
ILAS 225 - Southeast Asia: Crossroads of the World (3)
ILAS 261 - Language, Mind, and Thought (3)
JOUR 150 - Introduction to Mass Communication (3)
KNPE 100 - Scientific Basis of Human Activity (3)
KNPE 111 - Sport: Culture and Society (3)
MEE 200 - Energy and the Environment (3)
PHIL 352 - Philosophy of Science (3)
PSYC 245 - Thinking (3)
TECH 294 - Technology and Cultural Relevance (3)
WOMS 230 - Women in Contemporary America (3)
WOMS 235 - Women Across Cultures and Centuries (3)

Other Graduation Requirements

Graduation Requirements

Many majors, emphases, and areas of study have graduation requirements beyond those required by the university. Examples of such requirements include, but are not limited to, satisfactory production of a portfolio, maintaining a designated cumulative and/or major GPA, earning a certain grade in certain courses, successful performance on a standardized performance measure, and successful completion of clinical requirements. Students interested in these majors, emphases, or areas of study and students already admitted to them should consult department and college program requirements listed in the individual college and department sections of this catalog. Students are also strongly encouraged to consult with an adviser to assure they continue to qualify for graduation in their chosen major, emphasis, or area of study. See individual colleges and departments.

Second Major/Emphasis

A double major may require more semester hours than the 120-semester-hour minimum required for graduation. A student may fulfill the requirements for two separate majors ("double major") while earning one baccalaureate degree. The student must request entrance into the second major from the appropriate academic department. If the requirements for both majors are fulfilled, both will be indicated on the academic record.

If the second major requires a second degree (for example, if the student is pursuing a B.A. in history and wants a B.S. in economics as a second major), the student must complete the requirements for both degrees.

A student who wishes to complete two majors or two emphases in the same department must have written approval by the department curriculum committee and the major college curriculum committee.

The degree the student will be granted will be that permitted by the student's first declared major. Only one degree will be granted unless the additional requirements listed in the section entitled "Second Baccalaureate Degree" are also met.

Second Baccalaureate Degree

A student who earns a baccalaureate degree from NIU may receive a second such degree if all requirements for both degrees are met. The curriculum for the second degree must include at least 30 semester hours in residence above the minimum 120 semester hours required for the first degree at NIU.

A student who holds a baccalaureate degree from another college or university may receive a second such degree from NIU by meeting these requirements.

Being admitted to NIU.

Earning at least 30 semester hours of undergraduate credit in residence at NIU.

Fulfilling all requirements for a major other than the first major and all degree requirements.

Earning at least 12 semester hours of major departmental requirements in courses numbered at the 300 and 400 level taken at NIU.

A student may not apply any credit in physical education activity courses toward the 30 semester hours required for a second baccalaureate degree.

Minor

In order for the university to record on a student's transcript that a minor was successfully completed during the student's undergraduate program, the student must attain a minimum cumulative GPA of 2.00 in all courses taken in the minor at NIU.

Foreign Language Requirements for the B.A. Degree

Candidates for the Bachelor of Arts degree must demonstrate competence in a foreign language equivalent to that attained in two years of college instruction. This requirement must be met by

Successful completion of one of the following sequences.

Arabic: FLAR 103, FLAR 104
Burmese: FLBU 103, FLBU 104
Chinese: FLCH 101, FLCH 102, FLCH 201, FLCH 202
French: FLFR 101, FLFR 102, FLFR 201, FLFR 202
German: FLGE 101, FLGE 102, FLGE 201, FLGE 202
Greek: FLCL 103, FLCL 104, FLCL 203, FLCL 204
Indonesian: FLIN 103, FLIN 104
Italian: FLIT 101, FLIT 102, FLIT 201, FLIT 202
Japanese: FLJA 101, FLJA 102, FLJA 201, FLJA 202
Korean: FLKN 103, FLKN 104
Latin: FLCL 101, FLCL 102, FLCL 201, FLCL 202
Polish: FLPL 101, FLPL 102, FLPL 201, FLPL 202
Portuguese: FLPO 103, FLPO 104
Russian: FLRU 101, FLRU 102, FLRU 201, FLRU 202
Spanish: FLSP 101, FLSP 102, FLSP 201, and FLSP 202 or FLSP 215*
Tagalog: FLTA 103, FLTA 104
Thai: FLTH 103, FLTH 104

Four years of one foreign language with no grade lower than C at an accredited high school.

Exemption (no credit awarded) by

demonstrating competence equal to the work required in the last course in one of the sequences listed above on a four-skills test (reading, writing, listening, and speaking) administered through the NIU Office of Testing Services. Such examinations are available for languages taught by the faculty of the NIU Department of Foreign Languages and Literatures.
OR
registration as an international student at NIU, with a native language other than English.

Students with high school credit in French, German, or Spanish who wish to continue in that language must gain placement into the appropriate course in the desired sequence by taking the foreign language placement examination. On the basis of this examination, the student must begin the chosen language sequence in the course indicated by the placement examination, disregarding that course's prerequisites. For example, a student gaining placement into French 201 does not have to complete the courses FLFR 101 and FLFR 102. For placement in all other languages listed above, see the appropriate coordinator in the Department of Foreign Languages and Literatures.

*With consent of the Department of Foreign Languages and Literatures, native speakers of Spanish may substitute FLSP 215 for any and all levels of FLSP 101 through FLSP 202, as well as for FLSP 211.

Special Requirements for the B.S. Degree in Electrical, Industrial, and Mechanical Engineering

Candidates for the B.S. degree in electrical, industrial, and mechanical engineering must earn a minimum of 18 semester hours of course work in humanities, arts, social sciences, and interdisciplinary areas. Students must consult with their faculty advisers to determine appropriate courses.

All engineering students must have their schedule reviewed, approved, and signed by their faculty advisers each semester. Any deviation from an approved course schedule may delay graduation.

Special Requirement for the B.S. Degree in the College of Liberal Arts and Sciences

Candidates for the Bachelor of Science degree in the College of Liberal Arts and Sciences must fulfill a special college requirement. They must demonstrate competence in laboratory science and/or mathematical/computational skills equivalent to that attained in two years of college instruction (10-15 semester hours). See the College of Liberal Arts and Sciences section for a description of the requirement.

Application for Graduation

Choice of Catalog

The rules governing catalog choice for different categories of students are given below. However, no student may graduate under a catalog more than five years old, unless specific permission is obtained from the major college in a case where the major program in question is still available as an approved program of study. The rules given below apply only to requirements for majors, minors, and general education. All students are subject to the academic regulations stated in the most recent catalog.

Entering Freshmen

Students who enter NIU as first-semester freshmen should use the catalog current when they take their first course at NIU; they may shift to any later catalog which is in effect while they are enrolled. They may choose to satisfy all requirements from a single catalog or they may satisfy major and minor requirements from one and general education requirements from a second. Students earning a second major may choose a separate catalog for each degree only with the written approval of their college office.

Transfer Students

Students may choose the NIU catalog which was in effect when they became freshmen at their original school or any later NIU catalog, providing they were enrolled during the catalog year of their choice, but they cannot choose an NIU catalog which was in effect more than three years before their admission or reentry to NIU. They may also elect to satisfy all graduation requirements from a single catalog or major and minor requirements from one and general education requirements from a second.

Reentering Students

Students reentering NIU after an interruption of more than three years are subject to catalog provisions in effect at the time they reenter. (However, every effort will be made to count earlier courses in the way most beneficial to fulfilling current requirements.)

Students reentering NIU after an interruption of fewer than three years can use the catalog in effect at the time of their original admission to NIU or any later catalog.

Reentering students who have attended other colleges or universities while away from NIU are subject to the previously stated Transfer Students policy.

Postgraduate Students

Students pursuing a second baccalaureate degree are subject to the provisions of the catalog in effect at the time of their starting their second baccalaureate program or any later catalog.

Nondegree Students and Visiting Students

Nondegree and visiting students, if later admitted to degree programs, may choose the catalog current when they took their first NIU courses or any later catalog. If such students were previously registered elsewhere, they may choose the NIU catalog in effect when they entered their original school or any later NIU catalog. (But they cannot choose an NIU catalog in effect more than three years before their first enrollment at NIU.)

Applying for Graduation

Degrees are granted in December, May, and August.

Students who have completed 90 or more semester hours will be notified via e-mail that they are eligible to apply for graduation. The graduation application and fee payment form are available on the NIU website at www.reg.niu.edu/regrec/forms/endorsement/grad_info.html. The form must be printed and returned to the Office of Registration and Records. The graduation fee is due at the time of application. The deadlines for applying for graduation and commencement are as follows:

December graduation – November 1
May graduation – April 1
August graduation – July 1 (April 1 to participate in the May ceremony)

The Office of Registration and Records will check student progress toward graduation and identify any deficiencies using the DARS report and all supporting documents. Students will be notified during their last semester of any deficiencies and are directed to meet with their adviser. The DARS report is based on a declared major/minor and catalog choice made by the student in conjunction with their adviser.

Students who wish to change graduation dates after the first application must file a “Change of Graduation Information” form in the Office of Registration and Records. It is the student’s responsibility to notify the Graduation Evaluations Office in writing of their next intended graduation date. Upon such notification, the Graduation Evaluations Office will review the student’s academic record again at that time. An additional fee is not required.

Students completing degree requirements between degree dates may request that a statement of completion be noted on their academic records.

Degrees with Distinction

A student must have completed at least 60 semester hours of work at NIU to be eligible for graduation with distinction. Grade point averages are computed on the basis of all work attempted during those semesters which include the last 60 hours of work completed at NIU.

Degrees with distinction are awarded as follows, dependent on a student’s GPA at the time of graduation: *summa cum laude,* 3.90 through 4.00; *magna cum laude*, 3.75 through 3.899; *cum laude*, 3.50 through 3.749.

Students who have completed the requirements of the University Honors Program are graduated “With University Honors.”

Teacher Certification Requirements

Students seeking initial teacher certification should contact the academic department offering the certification program (see below). NIU's Office of the University Coordinator of Teacher Certification answers general questions about state certification requirements and refers students to the appropriate academic department for specific advising.

To teach in a public school in the state of Illinois an individual must possess an Illinois teaching certificate. NIU offers initial teacher certification entitlement programs which are approved by the Illinois State Board of Education (ISBE). NIU is accredited by the National Council for Accreditation of Teacher Education (NCATE). Below is a list of ISBE-approved initial teacher certification entitlement programs together with the academic department (or departments) at NIU with responsibility for administering each program.

Requirements for NIU teacher-certification programs are developed by the faculty in the context of state, national, disciplinary standards and requirements. Because students must meet the requirements of state law to be recommended for certification, a student may find his or her certification requirements changed for reasons beyond the university's control.

A student pursuing certification should meet with her or his adviser to develop a plan of study that will satisfy the certification requirements as they then exist. Once the plan of study is formally approved by the adviser, the requirements that student must meet in order to be recommended for certification will not be changed by the adviser except to the extent that it may be necessary to satisfy changes in state certification requirements. However, if other aspects of applicable departmental or university requirements are changed, the student may, with the approval of the adviser, modify the plan of study to conform to the new requirements. Because there may be delays in physical publication of new requirements as they are developed, departments and programs will make efforts to disseminate information about changes in requirements by other, more immediate means, including electronic media. A student who becomes aware of discrepancies between an approved certification plan of study and other published descriptions of certification requirements is responsible for contacting his or her adviser to ascertain whether there have been changes in state requirements that will necessitate changes in the plan of study.

Successful completion of the Illinois Certification System Assessment of Professional Teaching (ATP) test is not a requirement for graduation, but it is a requirement for teacher certification in Illinois.

Entitlement Program	**Academic Department/School**
Early Childhood Certificate (birth through grade 3)	Family, Consumer, and Nutrition Sciences or Teaching and Learning
Standard Elementary Certificate (K-9)	Teaching and Learning
Standard High School Certificate (6-12)	
Biological Science	Biological Sciences
Chemistry	Chemistry and Biochemistry
Earth and Space Science	Geology and Environmental Geosciences
English	English
Environmental Science	Geology and Environmental Geosciences
Family and Consumer Sciences	Family, Consumer, and Nutrition Sciences
French	Foreign Languages and Literatures
German	Foreign Languages and Literatures
Health Education	Allied Health Professions
History	History
Mathematics	Mathematical Sciences
Physical Education	Kinesiology and Physical Education
Physics	Physics
Social Science including economics, geography, political science, psychology, and sociology and anthropology	History
Spanish	Foreign Languages and Literatures
Standard Special Certificate (K-12)	
Art[1]	Art
Blind and Partially Seeing	Teaching and Learning
Learning Behavior Specialist I	Teaching and Learning
Music	Music
Physical Education	Kinesiology and Physical Education

Students who wish to pursue more than one teaching certificate must complete the NIU program requirements for each certificate. Endorsements (see "Definitions of Terms Used in This Catalog") are available for persons interested in broadening their qualification as teachers in conjunction with certain initial teacher certification programs.

Admission to Teacher Certification Programs

Each department has determined whether enrollment in a degree program is necessary to pursue the teacher certification program(s) administered by that department.

Admission to the university or to a degree program in an academic department, school, or college does not necessarily constitute acceptance into a certification program. Candidates for admission to a teacher certification program should apply directly to the academic department responsible for administering the program regarding information about admission.

All candidates for admission to teacher certification programs must demonstrate competence in reading, communication, and mathematical skills. Candidates should contact the department responsible for administering the certification program regarding specific procedures for demonstrating this competence.

The GPA for all postgraduate students, including those whose initial baccalaureate degree was earned at NIU, will include only postgraduate course work attempted at NIU.

[1] Students with an undergraduate degree must be admitted to the M.S. program in art with a specialization in art education to enter the certification program.

University Requirements for Teacher Certification

These are the minimum university-wide requirements for teacher certification. See also the individual academic departments, because some programs exceed these requirements.

Common Requirements for Teacher Certification

Upon satisfactory completion of one or more of the above initial teacher certification programs, students will be recommended for certification. In order to be certified to teach or supervise in Illinois public schools, a person must be of good character, in sound health, and at least 19 years of age. The following general requirements must be satisfied by all candidates for certification. (See the academic department for specific information on other requirements.)

An overall GPA of 2.50 or above in all course work taken at NIU for admission to and retention in a certification program. A passing grade is required in all course work taken for teacher certification. Some programs have higher GPA and/or course grade requirements. (See the academic department about specific requirements.)

Successful completion of designated clinical experiences, including a minimum of 100 clock hours of approved clinical experience prior to student teaching. These experiences must be gradual and sequential throughout the preparation period

Completion of the requirements for the Illinois State Board of Education approved "Major Area of Specialization" for which the certificate is sought.

An earned baccalaureate degree from a recognized institution.

Successful completion of a basic skills test, a test of subject matter knowledge, and the Assessment of Professional Teaching test administered by the Illinois Certification Testing System are all required for certification.

Successful completion of course work and/or experience which contributes directly to an awareness of cultural diversity. (See the academic department about meeting this requirement.)

General Education Requirements for Teacher Certification

The university's general education requirements for teacher certification are met when the general education requirements for an NIU baccalaureate degree have been met. A student who already holds a baccalaureate degree from an accredited institution, or the equivalent from a recognized foreign institution, is considered to have met the university's general education requirements for certification.

Professional Education Requirements for Teacher Certification

Early Childhood Certificate
Standard Elementary Certificate
Standard High School Certificate
Standard Special Certificate

Each type of certificate requires the student to complete professional education courses. The course requirements for the Early Childhood, the Standard Elementary, the Standard High School, and the various Standard Special Certificates are listed in the department sections of this catalog.

Endorsements

Middle Grades Endorsements

Students seeking an elementary or secondary teaching certificate who wish to teach in the middle school grades (5-8) must have a middle grades endorsement on their certificates. Depending on a student's major, this could mean additional courses or a specific course sequence. Students should see the discipline coordinator in the area of the intended endorsement for specific information on how to become eligible for the middle grades endorsement upon being recommended for certification.

Secondary Endorsements

Students seeking a secondary teaching certificate who wish to be endorsed to teach additional subjects must have secondary subject-matter endorsements on their certificates. Students will be required to take additional course work. Students should see the discipline coordinator in the area of the intended endorsement for specific information on how to become eligible for secondary endorsements upon being recommended for certification.

Student Teaching

Students must apply in advance for student teaching. (See the department adviser regarding the time to apply for placement.) Transportation to the student teaching site is the responsibility of the student. In addition to having completed the NIU certification program requirements, prior to student teaching the student must (a) have earned a minimum of 14 semester hours at NIU, (b) have earned 90 semester hours, and (c) make all arrangements for student teaching through the appropriate department. Students may not make their own arrangements for student teaching sites nor may they request a change once an assignment has been confirmed by the cooperating school. For additional requirements students should see the appropriate department adviser.

Retention in Teacher Certification Programs

Admission to teacher certification programs does not guarantee continued acceptance unless the student maintains satisfactory grades and other qualifications. A candidate for a student teaching assignment or certification must have good character, sound mental and physical health, and must demonstrate the skills, attitudes, and behaviors necessary for working with children and/or adolescents, as applicable.

Specific requirements for retention in an initial teacher certification program are determined by the faculty offering that program; students should consult the academic department for information.

Appeals

A student who wishes to appeal a grade or grades should utilize the current NIU Procedures for Use in Appealing Allegedly Capricious Semester Grades of Undergraduate Students (Grade Appeal Policy). A student who wishes to appeal a decision regarding admission to, retention in, or completion of an initial teacher certification program should consult with the appropriate college advising office regarding the procedures to be followed.

Criminal Background Check

Illinois law requires Illinois school boards to conduct a criminal background investigation on applicants for employment. This law also prohibits the employment of any person who has been convicted of committing or attempting to commit any one or more of a number of offenses. At present, offenses include first degree murder; any Class X felony; juvenile pimping; soliciting for a juvenile prostitute; exploitation of a child; obscenity; child pornography; harmful material; criminal sexual assault; aggravated criminal sexual assault; criminal sexual abuse; aggravated criminal sexual abuse; offenses set forth in the Cannabis Control Act; and crimes defined in the Illinois Controlled Substances Act. Employment must be denied whether the offenses and/or conviction occurred inside or outside the state of Illinois.

All candidates for Illinois teacher certification through programs under the purview of NIU's Committee on Initial Teacher Certification are required to submit to a fingerprint-based criminal background check by the Illinois State Police prior to their initial field experience in the schools. A student convicted of an aforementioned offense may not be placed in any schools, and NIU will not recommend for certification a person convicted of an aforementioned offense.

Persons whose criminal background check reveals an offense other than the foregoing may be recommended for clinical placement if, in the judgment of the discipline coordinator, the offense should not disqualify the individual from such placement. In making this judgment, the discipline coordinator will consult with the college certification office, and will take into account the nature and circumstances of the offense, the lapse of time since it occurred, whether there are repeated offenses, and the nature of the certification program and of the students that it prepares candidates to teach. An adverse decision may be appealed through the appeal procedure approved by the Committee on Initial Teacher Certification.

Out-of-State Employment in Public Schools

Other states have similar or additional certification, licensing, or employment requirements. NIU is not responsible for informing any student of statutes, rules, or regulations which might affect the future certification or employment of teachers. Students wishing admission to any NIU teacher certification program are responsible for determining their own eligibility for eventual certification in another state.

Academic Regulations

Regulations in this catalog represent the policies adopted by the faculties and administration of NIU. A student who believes that his or her situation warrants an exception to one of these regulations should consult with the advising dean of his or her college or with the Academic Advising Center, if the student has no college affiliation.

Advisement and Registration

Advisement System

College Offices

Advisement, information, and other academic assistance are available in the advising offices of the six colleges with undergraduate programs. Each college also provides student services such as policies on and forms for overloads, withdrawals from the university, and petitions for requirement waivers. Questions concerning retention, dismissal, and reinstatement should be directed to the office of the college in which the student's major department is located.

The advising office of the College of Liberal Arts and Sciences advises all students who are undecided about their majors within the college and all freshmen and sophomores who have declared a major in a department in the College of Liberal Arts and Sciences. The advising office is staffed by academic advisers.

All College of Business students who have not enrolled in upper-level business courses are advised in the college's undergraduate studies office. Once enrolled in upper-level business courses, students are advised in the department in which they have a declared major.

Individual departments in the College of Education provide academic advisement for students majoring in those departments, as well as information about admission to teacher education and certification for students in early childhood, elementary, and special teacher education programs.

All students in the College of Engineering and Engineering Technology are advised in the department of their intended or declared major.

Students in the College of Health and Human Sciences are advised in the departments in which they have declared majors. Undeclared majors in the College of Health and Human Sciences are advised in the college advising office.

Students in the College of Visual and Performing Arts receive academic advisement in their major departments. Students whose advisement needs cannot be met in their major departments are referred to the college advising office.

Academic Advising Center

The Academic Advising Center advises all students who have no college affiliation. The Academic Advising Center is staffed by academic advisors and supports the distinct nature of advising within the colleges and academic departments at Northern Illinois University. The Academic Advising Center will not, under any circumstances, initiate or approve exemptions to curricular requirements or requests for waivers to university graduation requirements.

Locations of college advising offices and the Academic Advising Center are as follows.
Business–Barsema Hall 201
Education–early childhood elementary, and special education: Gabel Hall 138
Kinesiology and physical education: Anderson Hall 221
Engineering and Engineering Technology–Engineering Building 331
Health and Human Sciences–Wirtz Hall
Liberal Arts and Sciences–Zulauf Hall 201
Visual and Performing Arts–Music Building 141
Academic Advising Center – Campus Life Building 120

Major Departments

Each department has faculty advisers who help students plan their programs of study and schedules for each semester and advise them on academic problems.

Students are responsible for checking with their major department and adviser and the Office of Registration and Records to see that they will have met all university and departmental requirements by the time they expect to graduate.

Declaration of Major, Minor, and Degree

Applicants for Admission

The university requires both freshman and transfer students to indicate their primary area of academic interest at the time they apply for admission. This information is needed for purposes of academic advisement and for institutional planning. It is understood that experience in university courses and further consultation with academic advisers may lead to changes in the student's academic interests.

Enrolled Students

Although enrolled students indicate a primary area of academic interest when they apply for admission to the university, this *does not* constitute a declaration of a major, minor, or degree. Each undergraduate student is required to make a *formal* declaration of major in addition to the indication of academic interest filed at the time of admission. This formal declaration is required by the end of the semester in which 60 semester hours of credit will have been earned.

Procedure for Declaration of Major, Minor, and Degree

After beginning course work, a new undergraduate student or a transfer student with fewer than 60 semester hours of credit must declare a major and emphasis, if applicable, and degree at the office of the department governing the program desired by the student. The student will complete a "Major Request" form in that office. This must be done by the second week of the second semester of enrollment.

A transfer student with more than 60 semester hours must follow the procedure indicated in the above paragraph, but this must be done no later than the end of the first semester of enrollment.

Students who have not followed the procedures outlined in the first paragraph above may not receive appropriate information, since they will not be included in the formal records of the department in which they hope to major. Additionally, a department may restrict enrollment in some courses to declared majors.

A student may declare a minor at any time by completing a "Minor Request" form in the office of the department offering the minor.

A student may not take a minor offered by the department of his or her major unless this is specifically permitted in the description of the minor.

Students may change a major, emphasis, or minor by completing a "Major Request" or "Minor Request" form at the office of the department that they wish to enter as a major or minor. Students remain under the jurisdiction of their current major college office until the change of major becomes effective. Major changes for students who have not been academically dismissed or retained on academic probation initiated within the last three weeks of the term, including the final examination period, will become effective one week after the end of the final examination for that term. Major changes for students who have been academically dismissed or retained on academic probation will require acceptance of the college of the new major.

There are major programs in the university in which acceptance of students either is limited or requires the meeting of specific criteria. Some of these programs may require acceptance into a major or emphasis at the time of original entry into the university or prior to the time interval specified in the first and second paragraphs. See "Limited Admissions and Limited Retention Requirements" and individual departments.

Many majors have course requirements outside the department. Students, through consultation with an adviser, should insure that these requirements are taken at the appropriate program stage.

There are some majors in which a student must follow a highly structured sequence of courses. It is important to get advice as early as possible to plan a program of study.

There are also some minors which have admission requirements. See individual departments.

Registration

Registration procedures and timetables as well as class offerings are published in the *Schedule of Classes* for each semester. Students will not receive credit for any course for which the registration was not completed according to these procedures.

Students who have any obligation to the university (such as unpaid fines, tuition, fees, dormitory charges, missing admission documents) will not be allowed to register for classes until all obligations are met.

Registration is not complete until all tuition and fees are paid. Individuals who have not paid tuition and fees by the deadline will have their registration canceled. Registration may be canceled for students who fail to satisfy admission or registration requirements.

Certificate of Undergraduate Study

A certificate of undergraduate study is awarded upon successful completion of a specified coherent set of undergraduate courses around a specific theme. Notation of a specific certificate of undergraduate study will be posted on the student's transcript upon the successful completion of the requirements for that certificate. To pursue a certificate of undergraduate study, a student must be admitted to NIU, must submit an application to the appropriate academic unit, and must have the application approved. Some certificates of undergraduate study may have additional admission requirements.

Only courses taken at NIU may be applied toward a certificate, and a GPA of at least 2.00 must be earned in the course work used toward the certificate, all of which must be completed within the period of time specified in the requirements for the certificate. With the approval of the major department, courses used to satisfy requirements of a certificate may also be applied toward an undergraduate major. See the individual certificate of undergraduate study for other specific requirements.

Certificates of undergraduate study with the following titles are available.

- Actuarial Science (Department of Mathematical Sciences)
- Applied Ethics (College of Business and College of Liberal Arts and Sciences; *see* "Inter-College Interdisciplinary Certificate.")
- Asian American Studies (College of Liberal Arts and Sciences)
- Geographic Information Systems (Department of Geography)
- Homeland Security (College of Engineering and Engineering Technology, College of Health and Human Sciences, and College of Liberal Arts and Sciences; *see* "Inter-College Interdisciplinary Certificates.")
- Lesbian, Gay, Bisexual, and Transgender Studies (College of Liberal Arts and Sciences)
- Philosophy of Education (Department of Leadership, Educational Psychology and Foundations)
- Professional Teaching Practices (College of Education)

Schedule Changes

See the appropriate *Schedule of Classes* for deadlines for adding/dropping a course and for withdrawals.

Add/Drop Procedure

Add/drop procedures include adding a class, dropping a class, changing from audit to credit or credit to audit, changing a section of the same course, and changing to or from the pass/fail option. No add/drop is valid unless recorded by the student with the Office of Registration and Records. Schedule changes may be made only during the first week of classes. No new classes may be added after this period.

However, courses which are dropped by the fifth calendar day of a semester will not appear on a student's record. Beginning with the sixth calendar day of a fall or spring term, all course load reductions become withdrawals, with the exception of last-half semester courses. For withdrawal from a class after the fifth calendar day, see the following section.

For the summer session, the add and drop deadlines for a full session course or a course that meets for at least a half session is the third day starting from the Monday of the week in which the class begins. For a class that meets for less than a summer half session, the add and drop deadline is the date of the first class meeting. For withdrawal from a summer session class, see the following section.

Withdrawal from a Course

All requests for withdrawal from a course must be initiated and processed through the central advisement office of the college in which the student is pursuing a major, or the Academic Advising Center, if the student has no college affiliation. (Nondegree students initiate withdrawals through their college of academic interest.)

A student may withdraw from a course up to the end of the eighth week of a semester, or the fourth week of a half-semester course or eight-week summer session course. For courses of other lengths, the withdrawal deadline is the end of the first half of the course. A W is recorded for course withdrawals properly processed prior to the established deadlines. (A W is a clerical symbol, not a grade. It has no effect on semester or cumulative GPA.)

A student may withdraw from a course after the established deadlines only in exceptional cases supported by acceptable evidence of serious illness or other major nonacademic personal difficulty. Approval of a course withdrawal after the deadline may be granted only by the dean (or the dean's delegate) of the student's college, or by the Vice Provost (or the Vice Provost's delegate) for any student who has no college affiliation. If such approval is given, W will be recorded for the course if the student is passing at the time of withdrawal; if the student is not passing at that time a grade of F will be recorded and included in both the term and cumulative GPA.

New students and transfer students are limited in the number of semester hours from which they can withdraw. Students with fewer than 7 transfer hours are allowed to withdraw from a total of 17 semester hours during the pursuit of the baccalaureate degree.

The maximum number of hours from which a transfer student may withdraw during pursuit of a baccalaureate degree at NIU is determined by the number of hours of transfer credit accepted at the time of enrollment at NIU plus all hours earned at NIU prior to enrollment, as indicated in the following table.

Transfer Plus Pre-enrollment NIU Hours	*Maximum Withdrawal Hours*
1-6	17
7-15	15
16-30	12
31-45	9
46 or mroe	6

All exceptions to this policy must be approved by the dean of the appropriate college.

Students who cease to attend a course in which they are enrolled without officially withdrawing as explained previously will receive an F for that course.

Withdrawal from the University

Any undergraduate student who desires to withdraw from the university must obtain a withdrawal form and permission to withdraw from the dean (or the dean's delegate) of the college in which the student is enrolled. The Vice Provost (or the Vice Provost's delegate) would assist any undergraduate student who has no college affiliation. With such approval, a withdrawal may be made without penalty up to the end of the eighth week of the semester. When students officially withdraw from the university after the eighth week of the semester their grades are recorded as W in the subjects in which they are passing and as F in the subjects they are failing at the time they leave the university. Students who leave the university without officially withdrawing will receive a grade of F at the end of the semester in each of the courses for which they are registered.

A student who withdraws from the university must obtain permission from her or his last major college or the Vice Provost (or the Vice Provost's delegate), if the student has no college affiliation, to reenroll during the semester in which the student withdrew from the university, if that reenrollment will occur after the add/drop period. (See "Add/Drop Procedure.")

Grading System

Grades

Grades assigned in each undergraduate course are intended to reflect achievement relative to a defined level of competence. Faculty members are expected during the first week of a semester to indicate clearly the requirements in a course and the level of competence to be associated with each of the possible letter grades. Multisection courses are expected to require similar levels of competence in all sections. Department and college curriculum committees shall be responsible for implementing these policies.

Credit is expressed in semester hours. One semester hour usually means pursuit of a subject for one 50-minute period per week for a 15-week semester. A student accumulates grade points based on the grades earned. The symbols, their meaning or level of competence indicated, and their grade point values are as follows.

Meaninig		*Points Per Hour*
A	Outstanding competence	4
B	Above satisfactory competence	3
C	Satisfactory level of competence	2
D	Marginally satisfactory competence	1
F	Unsatisfactory level of competence	0
I	Incomplete	-
W	Passing at time of withdrawal from a course or from the university	-
P	Pass	-
S	Satisfactory	-
U	Unsatisfactory	-
O	Audit; no grade and no credit	-
OW	Audit; requirements not completed	-
CR	Proficiency credit	-
NR	Grade not reported	-

A,B,C,D,P, and S are recorded for credit courses for which the student has been given a passing mark. The grading symbol CR indicates that proficiency credit has been received for the course, and that course is not included in the student's GPA.

An F or U is recorded when a student fails to earn a passing grade in a course; a student withdraws from a course without official notice; a student withdraws from a course with official permission after deadline but is not doing passing work at the time; or a student is not doing passing work at the time of withdrawal from the university.

An NR is recorded when an instructor submits the grade roll for the section after the deadline for reporting grades at the end of the semester. The NR symbol will be changed to the grade specified by the instructor upon submission of the grade change form. If no form is submitted within six weeks in the next term (fall or spring semester or summer session), the NR symbol automatically reverts to a grade of F.

Grade Point Average (GPA)

The grade point system is used to determine academic standing and to award honors. To compute the GPA, the total number of grade points earned is divided by the total number of GPA hours attempted at NIU (those for which grades of A,B,C,D, or F are recorded), as in the following example.

Courses	*Hours*	*Grade*	*Points Per Hour*	*Points Earned*
BIOS 103	3	A	4	12
ENGL 103	3	B	3	9
FLFR 201	3	C	2	6
HIST 100	3	D	1	3
COMS 100	3	F	0	0
Total	15			30

GPA equals 2.00 (30 points earned divided by 15 hours attempted). In calculating a student's GPA, only NIU work is included.

S/U Grading

In those courses in which the S/U grading basis is applicable, the use of S and U will apply to all students registered in any class section in which the S/U grading basis is employed. Individual students may not elect S and U grading; S/U grading is not equivalent to the pass/fail option.

Pass/Fail Option

NIU offers a pass/fail (P/F) option to encourage students to explore areas of academic work which they might not otherwise undertake. Students should check the individual college and department policies on pass/fail; these may vary from the university policy. The P/F option is open to all undergraduate students enrolling in undergraduate courses *with the following exceptions.*

Courses taken to satisfy a general education requirement.

Courses taken to satisfy the foreign language requirement for the B.A. degree. (This restriction applies to each course in the chosen foreign language sequence used in meeting the B.A. requirement.)

Courses required for the major program, both from the major department and from other departments. Some departments and colleges further restrict the pass/fail option, as indicated by explicit statement in this catalog.

Courses required for the minor, both from the minor department and from other departments. Some departments and colleges further restrict the pass/fail option, as indicated by explicit statement in this catalog.

Courses taken for a concentration in an interdisciplinary area (except with the prior approval of the area coordinator).

Professional education courses required for certification (except elementary and special, with the prior approval of the appropriate education department)

Courses involving extensive use of student teams in the instructional process where the grade the student earns in the course is heavily dependent on the effort of the team–such courses shall be so identified in their catalog descriptions.

In addition, a student may not take more than one course on a P/F basis in any one semester or summer session nor offer more than 12 semester hours of credit in P/F toward the graduation requirement of 120 semester hours.

Students following major programs offered by the College of Business or the College of Liberal Arts and Sciences should be aware of further restrictions on the use of P/F credit. These can be found in the introductory section for the College of Business and the College of Liberal Arts and Sciences.

To elect courses for P/F credit, students may mark the pass/fail box on their registration forms or notify the Office of Registration and Records by the end of the third week of the semester or summer session.

Students who elect the P/F option may change to the regular grading system any time up to the end of the sixth week of the semester (or the third week of summer session) by requesting the change through the Office of Registration and Records.

Instructors are *not* informed as to which students have elected the P/F option in their courses, but evaluate all their students in terms of the regular university grading system. A grade of P is recorded for P/F students who received a grade of D or better. An F under P/F is the same as an F under the regular grading system.

If a student takes a course on a P/F basis and later changes to a major in which that course is a requirement, then the actual grade earned in that course (A through F) will appear on the student's transcript, rather than the P or F.

Students applying for admission to graduate schools or professional schools may request that actual grades earned in P/F courses be forwarded with the official transcript. When this option is exercised, grades in all P/F courses are reported.

Incompletes

A grade of I (incomplete) is assigned at the discretion of the instructor, when illness, death in the immediate family, or other unusual and unforeseeable circumstances not encountered by the other students in the class prevent completion of the course requirements by the end of the semester. Under these circumstances, a grade of I (incomplete) may be assigned when a student is unable to complete the course requirements but only when it is possible that the completion of the remaining work could result in a passing grade.

An I (incomplete) grade received during the fall semester, the spring semester, or the summer session must be cleared no later than the end of the tenth week of the next fall or spring semester of enrollment unless the incomplete is extended by the instructor. All incompletes, whether extended or not, must be cleared within a year of when the grade was assigned.

An I (incomplete) must be resolved within the appropriate time limit or it will automatically be changed to an F. The student is responsible for seeing that incompletes are made up before the expiration date.

Before submitting grades to the Office of Registration and Records, an instructor who assigns a grade of I (incomplete) will provide the chair of the department with a written statement of the remaining work to be completed to remove the incomplete. Upon request, the student may obtain a copy of that statement from either the instructor or the department chair.

Grade Appeals

The university has a formal procedure under which a student can appeal a grade. Copies of the procedure for appealing allegedly capricious grades are available from the university ombudsman, department offices, and college offices.

Repeating a Course

The policy outlined here pertains only to courses taken at and repeated at NIU. Repeating a course taken at another college or university is governed by the policy on repeated courses in the section on transfer credit. The opportunity to repeat a course under this policy will end with the awarding of a degree. The NIU transcript will reflect the GPA as specified in the following policy. However, students should be cautioned that some limited admissions programs recognize all attempts for admission purposes and that when students apply to professional schools and/or graduate schools, all attempts at courses could be considered in that application process.

A student may repeat any course in which a grade of D or F was received. The grade which the student earns in the repeat will replace the original grade in the GPA calculation, but both grades will always appear on the student's official transcript. If this repeat commences within a 13-month period from the end of the semester in which the course was first taken, the GPA of the student will include only the grade for the second enrollment. For any repeat of a course for which a student has received an F that does not commence within a 13-month period, the GPA will include both enrollments. For any repeat of a course for which a student has received a D that does not commence within a 13-month period, the GPA will not include the second grade and additional credit will not be awarded. In all cases, the permanent record of a student repeating a course will report each enrollment in the course. (A course withdrawal does not count as a repeat.)

A student may not repeat a course taken at NIU in which a grade of C or better was earned, unless the contrary is stated in the catalog description of the course.

A student who does not earn a C or better after two (or more) attempts in a course may petition to retake the course. The student must secure permission of the dean of his or her major college and of the chair of the department in which the course is offered.

All grades received in the course will appear on the transcript and all grades, except the initial one, will be used in the GPA calculation. Credit may be earned only once unless the course description in the catalog states otherwise. Exceptions to this policy may be granted only by the dean of the student's major college. In all cases, third or subsequent enrollments in a course may be allowed only if the department in which the course is taught agrees to permit enrollment.

All students repeating courses under the provisions outlined above must so indicate on the appropriate registration form or notify the Office of Registration and Records by the end of the sixth week of each term (third week for summer session).

Change of Grade

Final grades, once given to the Office of Registration and Records, cannot be changed without a written request for the change of grade signed by the department chair. In the case of undergraduates, the request is sent directly to the Office of Registration and Records if it is made within 30 days after the end of a semester; later requests for grade changes must go through the appropriate college office. All grade changes proposed for academically dismissed students must be submitted to the college office. In the case of graduate students, a request for a grade change is sent to the Graduate School for transmission to Registration and Records. A grade change request for an undergraduate taking a graduate course is also sent to the Graduate School.

Any change of grade in an undergraduate course (other than from Incomplete) submitted more than one month after the opening of the next session in which the student is enrolled requires the written explanation and approval of the instructor of the course, the chair of the department, and the dean (or delegate) of the college in which the grade was awarded.

Academic Probation and Dismissal

First-semester freshmen whose GPA falls below 1.60 for all work attempted at NIU will be placed on probation. All other undergraduate students failing to maintain a minimum cumulative GPA of 2.00 for all work attempted at NIU will also be placed on probation. Students placed on probation are required to schedule an appointment for a probation interview with the dean (or the dean's delegate) of their major college. Students placed on probation who have no college affiliation are required to schedule an appointment for a probation interview with the Vice Provost (or the Vice Provost's delegate).

Students may enroll at NIU at least once while on academic probation.

Students failing to remove academic probation after one enrollment by attaining a cumulative GPA in NIU courses of at least 2.00 will become candidates for academic dismissal from the university.

Students failing all of the courses for which they are registered for a single semester, including summer session, will become candidates for academic dismissal from the university.

The academic record of each candidate for dismissal will be reviewed by the dean of the student's major college (or the dean's delegate). The dean (or the dean's delegate) may elect to retain on academic probation some students who are candidates for academic dismissal. The Vice Provost (or the Vice Provost's delegate) will review the academic record of those candidates for dismissal who have no college affiliation. All students not retained on academic probation will be academically dismissed from the university.

Students retained on academic probation must raise their cumulative GPA in NIU courses to at least 2.00 by the end of the next enrollment. Those failing to do so will again become candidates for academic dismissal from the university and their records will be reviewed as described above. Additional retention on academic probation will be granted only in exceptional cases.

Students re-entering on final probation (see "Reinstatement") who fail to attain a new cumulative GPA of 2.00 or higher will be dismissed.

After a student has earned 90 or more semester hours (including NIU courses and all transfer credit), he or she must have attained a cumulative GPA in NIU courses of at least 2.00 if the student was ever previously continued on academic probation or reentered with a baccalaureate-oriented associate degree from an Illinois public community college earned after leaving NIU. Students who fail to maintain a cumulative 2.00 or higher GPA will be academically dismissed. Additional retention on academic probation will be granted only in exceptional cases.

Students who have been academically dismissed from the university may not enroll again at NIU unless reinstated to the university through the procedure described in the section on "Reinstatement" or "Reentrance of Community College Graduates."

Credit by Examination

NIU provides a variety of opportunities for students to obtain college credit by examination. Credit may be awarded through the Advanced Placement (AP) Program, the College-Level Examination Program (CLEP), the Defense Activities for Non-Traditional Educational Support program (DANTES), and other NIU proficiency examinations.

Advanced Placement

The Advanced Placement (AP) Program is a series of national examinations that measures the knowledge and skills acquired by students who have taken AP courses. The courses and examinations are administered by high schools and the resulting examination scores are sent to colleges of the students' choice. Students with sufficiently high scores on certain AP examinations may be eligible for specific course credit. Specific course credit awarded on the basis of AP is subject to the provisions specified below under "General Provisions."

Participants applying for NIU admission should arrange to have their AP examination records sent to the NIU Office of Testing Services, Adams Hall 128, (815) 753-1203. Information on the required scores and specific course credit awarded can be accessed on the Internet at www.niu.edu/testing.

College-Level Examination Program and Defense Activities for Non-Traditional Educational Support

NIU recognizes that some students have acquired proficiency in college-level material outside of the traditional college classroom. The College-Level Examination Program (CLEP) and Defense Activities for Non-Traditional Educational Support (DANTES) provide these students with the opportunity to demonstrate their college-level learning through examinations that assess the knowledge taught in common college courses.

NIU awards credit for satisfactory performance for four of the five CLEP general examinations and for several of the CLEP and DANTES subject area examinations. Credit awarded on the basis of three of the CLEP general examinations–Humanities, Natural Sciences, and Social Sciences and History–is not course-specific but applies toward NIU's general education requirements. A total

of 19 semester hours of credit toward NIU's general education requirements is available through the CLEP general examinations. This credit will be superseded by general education credit awarded on the basis of transfer or other credit by examination, as well as by credit already earned through NIU course work; such credit may reduce the CLEP general education credit for which the student qualifies. Specific course credit awarded on the basis of CLEP and DANTES subject area examinations is subject to the provisions specified below under "General Provisions."

Official CLEP and DANTES score reports should be sent to the NIU Office of Testing Services, Adams Hall 128, (815) 753-1203. Information on the examinations, required scores, and specific course credit awarded can be accessed on the Internet at www.niu.edu/testing.

NIU Proficiency Examinations

Credit for all 100- and 200-level general education courses except COMS 100, ENGL 103, ENGL 104, and MATH 101 may be earned through proficiency examinations administered through academic departments. These examinations are designed for students who have acquired proficiency in college-level material outside of the traditional college classroom.

All departments are encouraged to use standardized examinations or provide specially constructed departmental examinations for granting credit to students who demonstrate college-level learning. In such areas as art and music, creative works and professional experience might be used as evidence for granting credit. Students who want to receive credit on these bases should consult the appropriate department.

A student's eligibility to attempt locally administered examinations or to submit external examination scores for credit consideration is determined by the department or coordinating committee under whose direction the credit may be granted.

Normally, a student may attempt to gain proficiency credit for a particular course only once. When more than one form of the examination is available, the student may, at the discretion of the appropriate department chair or other responsible authority, be allowed to attempt the second form of the examination.

General Provisions

Eligibility for credit by examination is subject to several restrictions and conditions. Students must be enrolled at NIU to receive credit by examination. All credit by examination awarded by NIU will be posted to the student's record with the symbol CR and will not be entered until after the 15th day of the student's first semester. No specific grade is attached to this credit.

Credit by examination will not be awarded for courses in which NIU credit has already been granted or for courses which substantially overlap or are prerequisites to courses in which a student is enrolled or are prerequisites to courses for which credit has already been granted. Credit may already have been granted on the basis of transfer, other credit by examination, or courses taken at NIU. Exceptions to these restrictions could occur in cases in which a student passed a credit-by-examination test prior to credit being granted in (or the student enrolling in) a course that would normally render the student ineligible for credit by examination. For example, a student enrolled in MATH 230 could be eligible to receive credit for MATH 229 based on an AP examination taken the previous May.

Credit for ENGL 103 and ENGL 104 may be earned through Advanced Placement, but not through the English Core Competency Examination. Passing a core competency examination fulfills the core competency requirement but does not result in the awarding of NIU course credit.

Credit by examination awarded by another institution is subject to provisions specified under "Transfer Credit." The number of semester hours that a student may be eligible to earn through credit by examination is limited by the number of examinations the student is allowed to take.

Transfer Credit

Effective fall semester 1998 and after for new transfer students and students reentering NIU with an A.A. or A.S. degree from an Illinois public community college, Northern Illinois University is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois transferable General Education Core Curriculum (GECC) between participating institutions. Successful completion of the GECC at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and allows students to transfer this portion of an associate or baccalaureate degree from one participating IAI institution to another without incurring a loss of credit.

See an academic adviser for additional information and/or read about the IAI at www.iTransfer.org. Also see "Illinois Articulation Initiative Core Curriculum."

General Provisions

Northern Illinois University accepts credit in transfer from any accredited institution of higher education, with credit from all accredited two- and four-year institutions subject to the following provisions.

NIU does not accept credit for intermediate algebra courses. Some other transfer credit may be used to fulfill NIU's general education requirements or may be applied as elective credit. Transfer credit can be applied toward the student's major (or minor) only with the written approval of the NIU department concerned.

Students may receive transfer credit for all work which averages to a C at each institution. (That is, only those D grades will transfer which are balanced by enough A's or B's to bring an individual's GPA up to C at that school.)

If students attend schools on the quarter-hour system, they can convert those hours to semester hours by multiplying quarter hours by 2/3 (i.e., 45 quarter hours equals 30 semester hours).

Credit for military educational experience may be granted based on recommendations found in *A Guide to the Evaluation of Educational Experience in the Armed Services.*

Students with a minimum of one year of active duty in and an honorable discharge from the U.S. Armed Services will receive 4 semester hours of general university elective credit provided they submit a copy of their DD214 to NIU's Office of Registration and Records.

Correspondence courses from accredited institutions may be accepted. (But students should be aware that NIU will accept a maximum of 30 semester hours of correspondence work toward their desired degrees.)

Credit awarded at another institution through credit by examination may transfer to NIU if the student completed at least 12 semester hours of transferable credit through regular classroom work; official test score reports are not required for such credit to be considered. Students with fewer than 12 semester hours of transferable credit through regular classroom work at another institution may wish to have their examination scores evaluated by arranging to have official score reports submitted to NIU's Office of Testing Services.

Upper-division credit will be granted for transfer courses if the course is equivalent to an NIU course at the 300 or 400 (junior or senior) level or if the course is a junior- or senior-level course at the previous school (if it is a four-year institution). Courses

from community colleges which substitute for 300- or 400-level courses at NIU may or may not be awarded upper-division credit. This decision is made by academic departments at NIU.

Continuing and reentering students intending to transfer credit to NIU after they have earned 90 semester credit hours or who will exceed 90 semester credit hours upon transfer of that credit must obtain prior approval from their major college at NIU before enrolling in the course(s) which they intend to transfer.

Credit from Community Colleges

Students from Illinois public community colleges should check with their community college counselor about credit transfer to NIU. Illinois public community college counselors have access to the NIU *Articulation Handbook*, or the Transfer Center web page: www.reg.niu.edu/transfercenter. The NIU Articulation Handbook gives detailed information on credit transfer policies as they apply to Illinois public community college transfer students. Students transferring from private or out-of-state community colleges should direct their questions regarding transfer credit to the Office of Registration and Records, (815) 753-0681.

Credit from community colleges is subject to these additional restrictions.

The courses must be baccalaureate-oriented, that is, directed toward an academic rather than an occupational/technical program. Courses which are normally vocational or remedial are not accepted for transfer. (But certain NIU departments may make exceptions.)

Students may transfer up to 66 academic semester hours plus 4 semester hours of physical education activity courses.

Illinois community college A.A. or A.S. graduates may be eligible for certain exceptions to transfer credit policies. Students can discuss these with their community college counselor or with a staff member in the NIU Office of Admissions. See " Illinois Public Community College Graduates."

The following students may be required to take additional general education courses and should consult an academic adviser.

Students seeking teacher certification.

Students majoring in a department in the College of Engineering and Engineering Technology.

Transfer of Illinois Articulation Initiative Credit to NIU

The General Education Core Curriculum (GECC) is only in effect for transfer students who are entering NIU for the first time and for students reentering with an A.A. or A.S. degree. See NIU's Articulation Handbook for details concerning transfer of specific course credit under the GECC. This is in effect for reentering students who complete the A.A. or A.S. degree even if they left NIU with 60 or more semester hours of credit or reenter with more than 80 semester hours.

Degree-seeking students who enter or reenter NIU with an A.A. or A.S. degree from any Illinois public community college will be considered to have completed NIU's general education requirements.

Degree-seeking students who enter NIU with the GECC completed will also be considered to have completed NIU's general education requirements. Note, however, that this does not apply to students who are reentering NIU without an A.A. or A.S. degree.

Degree-seeking students who enter NIU as first-time students will have individual GECC course work applied toward NIU's general education requirement. Note that this does not apply to students who are reentering NIU.

NIU also participates in the IAI Baccalaureate Majors' Curriculum (iTransfer Majors). NIU departments have identified certain iTransfer Majors courses that if taken at IAI participating institutions will transfer as specific NIU courses for students in the identified majors. The iTransfer Majors policy applies to transfer students who have not previously attended NIU and for students who are reentering NIU with an A.A. or A.S. degree. See NIU's *Articulation Handbook* for a detailed list of the iTransfer Majors courses and how they transfer to NIU.

N Grade

If it appears from the sending college's transcript key or catalog that an N (no credit) grading symbol may be equated with academic failure of a course (i.e., no other symbol is provided indicating failure or the N may encompass an F along with other attendance and grading symbols), it will be counted as an F and used in calculating the GPA for determining admission eligibility. The same holds for any other symbol which is used by a college in a similar manner.

Repeated Courses in Transfer

The calculation of the GPA for admission will not count repeated courses for which the student received a grade of C or better in the first attempt, nor will such courses be accepted for transfer credit. In those situations where a student has repeated a course for which a D or F grade was previously earned, the second attempt only will be utilized for the above purposes.

The evaluation of transfer credit will give the student the benefit of the doubt in identifying repeated courses. Courses will be identified as repeats only if they fall into one of the following categories.

The same course (by title or number, or both) has been taken twice at the same institution.

A course for which a student has been granted transfer credit is later taken at NIU. (See "Forfeiture of Credit.")

Two courses, taken at two different institutions besides NIU, are obviously identical. If a credit evaluator designates two such courses as repeats, and the student disputes the ruling, the student is responsible for providing evidence that the courses were different in content. The chair of the appropriate NIU department or a designated representative will be the final judge in any disputed cases.

When a grade of D is earned in a course taken at NIU, an equivalent course taken at another institution cannot be transferred to NIU for credit because previous credit has been earned at NIU.

Forfeiture of Credit

A student may repeat at NIU a course for which credit was earned at another institution. However, doing so causes the student to forfeit any transfer credit granted for the equivalent or substitute course taken at another college or university.

For any course in which a student's transcripts indicate that the same or a substantially similar course has been taken at both NIU and another institution, regardless of the order in which they were taken, the NIU grade shall be the one counted toward the student's NIU grade point average. Moreover, in no case will the same or a substantially similar course for which credit has been received both at NIU and at another institution be counted twice toward the fulfillment of any requirement. In any case in which a student has taken a course at one institution and retaken it at that institution or another before transferring to NIU, the latest grade will be the one counted.

If a student is transferring to NIU with an A.A. or A.S. degree from an Illinois public community college, courses which were repeated at and accepted by the degree-granting college toward the degree also will transfer to NIU.

Similarly, an individual who earns a grade of D in a course equivalent to NIU's COMS 100 and repeats the course, receiving a grade of C or better, will have satisfied the relevant requirement for teacher certification under NIU's entitlement program. The student will not, however, earn additional credit hours.

Military Science Courses

Credit from another school in military science will be accepted in transfer to a maximum of 8 semester hours, as elective credit.

Religion Courses

Religion courses will be accepted in transfer to a maximum of 10 semester hours, as elective credit. Additional credit may be transferred for courses which are evaluated as acceptable substitutes.

Concurrent Enrollment

Any student seeking an NIU degree, even if taking less than the amount of NIU course work specified below, is strongly urged to obtain prior approval before enrolling concurrently at NIU and another institution. (See also "Dual Admissions.") This procedure will assure that courses taken elsewhere will properly fit the student's NIU degree program.

A student will be considered "concurrently enrolled" if enrolled both at NIU and at another institution and if any course taken at the other institution is in session at any time during the NIU semester or summer session in question.

Students taking more than two NIU courses in a semester (more than one in a summer session) must obtain prior approval from the dean of their major college, or the Vice Provost, if the student has no college affiliation, for any concurrent enrollment. A student not complying with this requirement may not receive transfer credit for work undertaken at another institution.

Other Academic Policies

Classification of Students

Undergraduate students are classified as follows.

Freshmen–Fewer than 30 semester hours of credit
Sophomores–30 or more semester hours, but fewer than 60
Juniors–60 or more semester hours, but fewer than 90
Seniors–90 or more semester hours

Scholastic Load

The normal class load for undergraduate students is from 14 to 18 semester hours each semester. Students in their first semester of residence at the university may not carry more than 18 semester hours of work.

For the summer session, a normal class load is 9 semester hours for the entire summer session or 4 semester hours in either the first or last half session. Noncredit courses and audit courses are not considered a part of the class load for undergraduates.

Students who have established commendable scholastic records in the university (ordinarily at least a cumulative 3.00 GPA) may petition to take up to 21 semester hours of work during the semester and up to 12 semester hours in the summer. Petitions for overloads can be obtained at the student's major college office.

Course Selection

This catalog contains a description of each undergraduate course offered at NIU. Restrictions, if any, on the use of a specific course for meeting a requirement in a student's program are included in the course description. Other conditions governing a student's enrollment in a course are stated in the prerequisites or corequisites of the course.

Many courses are listed with prerequisites. This reflects the view of the faculty that successful completion of the course requires certain background material contained in the prerequisite course. Instructors assume knowledge of the content of the prerequisite course; students who fail to meet the prerequisite will be at a serious disadvantage.

Courses designated as corequisites for a given course must be taken simultaneously unless previously completed. Prerequisites to, or corequisites with, a given course can be met through equivalencies. Questions concerning equivalencies should be addressed to the chair of the department offering the course which lists the prerequisites or corequisites.

Students are eligible to enroll in any courses for which they have the proper prerequisites. Normally, however, freshmen begin their studies in lower-division courses (those numbered 100 to 299).

Freshmen who want to enroll in 400-level courses must obtain approval from the offering department.

Undergraduates in Graduate Courses for Undergraduate Credit

Undergraduate students at NIU may complete a maximum of 6 semester hours of 500- or 600-level course work for undergraduate credit, if they have completed 90 semester hours of credit towards their baccalaureate degree with a GPA of at least 3.00 or have previously completed a baccalaureate degree. They must also obtain, in advance, written approval from the instructor and from the office of the dean of the Graduate School to enroll in the course for undergraduate credit. In addition, for a 600-level course, the approval of the department offering the course is required.

Undergraduates in Courses for Graduate Credit

Seniors in their final semester at NIU who want to take courses for graduate credit (approved 400-level and any 500- and 600-level courses) must apply for and receive early admission to the Graduate School, which requires the same documents and approvals as regular admission. No student may enroll more than one term under early admission status. (See "Early Admission of NIU Undergraduates to the Graduate School.)

Graduate Students in Undergraduate Courses

Graduate students and students-at-large may enroll in undergraduate courses. Tuition for such classes is charged at the same rate as for graduate-level classes. While undergraduate course grades are not included in the graduate GPA, they are a part of the permanent record of the graduate student or student-at-large and appear on the transcript. Undergraduate hours are included in the calculation of academic load. For graduate students and students-at-large the deadlines and other conditions of enrolling in, dropping, or withdrawing from an undergraduate class are the same as those pertaining to a graduate class, as they are determined by the student's level, not the class level.

Internships and Practicums

A number of departments offer internship and practicum programs designed to provide the student with practical experience in a given field. These programs, which may be located on or off campus, are available only to students who have complied with specific departmental requirements. Detailed information on such matters as admission, performance, dismissal, and appeal should be obtained from the departments offering internship and practicum experience.

A student enrolled in a practicum or internship or otherwise obtaining academic credit through work or placement at an outside agency may be subject to the rules, regulations, and policies of that agency as well as those of the university.

Auditing Courses

With the permission of the instructor, students wishing to attend a course without completing all the requirements for credit may register to audit the course. A student enrolled as an auditor receives no credit in the course audited, but will have the audit recorded on the transcript if requirements determined in advance, in writing, between the student and the course instructor are satisfied. In order to audit a course the student must

be eligible to enroll in the university;

obtain the permission of the instructor of the course, and, if the audit is to be recorded on the transcript, determine from the instructor what attendance or other requirements must be met. (If these requirements are not met, OW rather than O will be recorded for this course on the transcript. See "Grading System.");

register in the usual way; and

pay the tuition which would be required if the course were being taken for credit.

An audited course is not considered part of the class load for undergraduate students. Registration in a course cannot be changed from audit to credit or credit to audit after the fifteenth calendar day of the semester. An audited course may be taken for credit in a later semester.

Attendance

The university does not use a "cut" system. Each instructor decides whether to excuse class absences and determines how to permit makeup work.

If a student will be absent from classes for a week or more because of an accident, illness, or other emergency, instructors will be notified of the absence only if students or their parents request it through the Division of Student Affairs. Health Services will not release information about students unless they provide a written request.

Accommodations for Students with Disabilities

A student who believes that special accommodations with respect to course work or other academic requirements may be appropriate in consideration of a disability must (1) inform the faculty in charge of the academic activity either at the start of the course or as soon as the student becomes aware of the activity or requirement in connection with which accommodation is sought, (2) provide the required verification of the disability to the Center for Access-Ability Resources, and (3) inform the latter office from which faculty member accommodations have been requested. If contacted by the faculty member, the staff of the Center for Access-Ability Resources will provide advice about accommodations that may be indicated in the particular case.

A wide range of services can be obtained by students with disabilities, including housing, transportation, adaptation of printed materials, and advocacy with faculty and staff. Students with disabilities who need such services or want more information should contact the Center for Access-Ability Resources, at (815) 753-1303.

Religious Observances and the Academic Schedule

The university recognizes that on occasion examinations or other scheduled academic activities may conflict with the religious observances of some members of the academic community, and accordingly encourages the instructional and administrative staff to make reasonable accommodations to minimize the resulting difficulties for individuals concerned. Students faced with such conflicts should notify the appropriate instructor or administrative area as much in advance of the examination or other activity creating the conflict as possible. Students believing that they have been unreasonably denied an educational benefit due to their religious beliefs or practices may bring the matter to the attention of the department chair, or where, for any reason, this would not be appropriate, to the dean of their college, for resolution.

Academic Records and Encumbrances

The Office of Registration and Records will issue transcripts (copies of NIU permanent academic records) upon request to students and former students not subject to a record encumbrance. A fee of $5.00 is charged for each transcript.

A record encumbrance is a restriction placed on a student's official academic record. Academic records may be encumbered under a number of circumstances, examples of which are past-due monetary obligation to the university (such as unpaid tuition, fees, fines, or residence hall charges); incomplete admission requirements (such as missing transcripts, ACT or SAT scores, etc.); and a disciplinary action by the university or the student judiciary.

Students may not be allowed to register or to have transcripts or diplomas issued after an encumbrance has been placed on their academic record. Students who have had an encumbrance placed on their record may direct inquiries to the office that requested the encumbrance or the Office of Registration and Records. Only the office requesting an encumbrance may authorize its removal. For immediate release of monetary encumbrances, all past-due obligations to the university must be paid for with a cashier's check, certified check, or money order.

See also "Student Information and Records."

Academic Integrity

Good academic work must be based on honesty. The attempt of any student to present as his or her own work that which he or she has not produced is regarded by the faculty and administration as a serious offense. Students are considered to have cheated if they copy the work of another during an examination or turn in a paper or an assignment written, in whole or in part, by someone else. Students are guilty of plagiarism, intentional or not, if they copy material from books, magazines, or other sources without identifying and acknowledging those sources or if they paraphrase ideas from such sources without acknowledging them. Students guilty of, or assisting others in, either cheating or plagiarism on an assignment, quiz, or examination may receive a grade of F for the course involved and may be suspended or dismissed from the university.

A faculty member has original jurisdiction over any instances of academic misconduct that occur in a course which the faculty member is teaching. The student shall be given the opportunity to resolve the matter in meetings with the faculty member and the department chair. If the facts of the incident are not disputed by the student, the faculty member may elect to resolve the matter at that level by levying a sanction no greater than an F for that course. The faculty member shall notify the student in writing whenever such action is taken, and the University Judicial Office shall receive a copy of the *Academic Misconduct Incident Report* indicating final disposition of the case, which will be placed in the student's judicial file. In all matters where the charge of academic misconduct is disputed by the student or if the faculty member feels a sanction greater than an F in the course is appropriate (such as repeated offenses or flagrant violations), the faculty member shall refer the matter to the University Judicial Office making use of the *Academic Misconduct Incident Report.* Additional sanctions greater than an F in a course can be levied only through the University Judicial System.

Classroom Disruption

Higher education is a privilege accorded to those students deemed able to profit from the attendant intellectual experiences. Students admitted to NIU are assumed to have the maturity to function appropriately in a variety of instructional situations.

When a student's behavior in a classroom, laboratory, or other formal learning environment is such that the rights of other enrolled students to an effective learning climate are being violated, the student shall lose the privilege of attending or receiving credit in the class.

In any case of the disruption of instruction by a student, the chair of the department may, after investigating the incident, suspend the student responsible from class attendance and recommend to the dean of the college that the student be permanently barred from the class. The student concerned is to be notified in writing of such action and may appeal the department's recommendation to the dean within one week of notification. Upon such written appeal, the dean shall conduct a hearing, providing for a presentation of the facts relative to the disturbance. The decision of the dean shall be final. If the recommendation to bar the student from class is upheld, the student will be officially withdrawn from the course following regular withdrawal procedures, with the date upon which the student was initially suspended as the effective date of the withdrawal.

Extreme and/or disruptive behavior will constitute grounds for dismissal from the university. The Student Judicial Office handles allegations of such behavior; the policies and procedures of that office are outlined in the Student Judicial Code.

For other regulations governing conduct and discipline, see the section "Conduct and Discipline Regulations" in the "Legal Notices" section of this publication.

Expenses

Tuition and Fees

Tuition and fees are subject to change. The official charges are those billed by the Bursar's Office during the fee payment period for each term. For the most recent tuition and fee rates, see the Bursar website at www.niu.edu/bursar.

Checks are receipted assuming the student has been approved for enrollment. An appropriate refund will be made if the university denies enrollment.

Fee Coverage[1]

Activity and athletic fees may be used to support services and privileges such as the use of gymnasium facilities and participation in intramural activities; admission to athletic events, concerts, dramatic productions, lectures, and speeches; and subscriptions to certain student publications. Additional charges for such services and privileges may be imposed as necessary.

Regional and Workshop Courses

Courses taught at regional sites are included in the calculation of tuition charges, but are excluded from total hours in the assessment of general student fees. Workshop hours are included in the assessment of general student fees. Tuition charges are applicable to the total enrolled hours, with an additional delivery fee for each regional course. (See "Special Fees" below.)

Special Fees

A student may be charged for departmental field trips, library fines, or excess breakage. When a course involves use of materials, rather than equipment, the student will ordinarily pay for such materials. Other special fees, not applicable to all students, are as follows.

Enrollment certification fee: $3.50
Fee for new international students: $125.00
Graduation fee (baccalaureate degree): $29.00
Regional-campus course/high-tech delivery fee: $40.00-$265.00 per semester hour
Replacement identification card (after the first is issued): $15.00
Technology surcharge
$50.00 for 6 or fewer semester hours
$100.00 for more than 6 semester hours
Transcript fee: $5.00

Class material fees where applicable will be billed as part of the total billing. See the current *Schedule of Classes* regarding those courses that require additional fees.

Room and Board Rates

Costs for housing for 2005-06 varied from $2742 per semester for a gold meal plan in a double room in one of the "low rise" residence halls to $4309 for a space in a single room and a titanium meal plan in a recently renovated "high rise" residence hall. Charges for the 2006-07 academic year are expected to increase.

Room and board, tuition, and fees may be paid each semester in one payment or by a credit plan. Students who elect to pay on the credit plan will be charged an interest rate to be determined by the university. (See "Payment of Fees.")

Refund Policies[2]

In the following discussion of policies governing refunds of tuition and fees it should be understood that "refund" refers to "refund of monies paid" only in cases in which a student has already paid the full balance due. Where payment in full has not yet been made, an equivalent adjustment may be made on the total amount due. If only a partial reduction in tuition or fee liability occurs, a student who had a balance due may still owe an additional amount beyond that already paid. If no reduction in liability occurs, not only will funds paid not be refunded, but the student will be liable for the unpaid balance.

Tuition and fees, due at the time of registration, include tuition, general student fees, material fees, the technology surcharge, outreach delivery fees, regional course fees, and health insurance fees. Refunds can be applied for at the Bursar's Office, unless otherwise noted. The following provisions govern refunds of tuition and fees.

A student who has registered and officially withdraws from the university may receive a refund of tuition and fees including any advance deposit thereon, according to the following schedule.

If withdrawal is prior to the first regularly scheduled class day–all tuition and fees.

If withdrawal is within the 60 percent point in time of the period of enrollment–a refund equal to the portion of the period of enrollment remaining, rounded downward to the nearest 10 percent, less an administrative fee not to exeed the lesser of 5 percent of the tuition, fees, and other charges assessed the student or $100.

If withdrawal is after the 60 percent point in time of the period of enrollment–no refund shall be made.

The university may designate shorter refund periods for special courses, short courses, and other enrollments of a limited nature.

Students may receive a refund of tuition and fees if the university declares them ineligible for enrolled status prior to the first day of regularly scheduled classes.

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[1]A complete listing of each fee amount and its designated use will be supplied upon request to the Office of Student Affairs. These fees are required of all students, unless a partial refund is warranted by study and residence more than 15 miles from campus, as defined under "Tuition and fee payment" in the *Schedule of Classes*.

[2] In this section, the term "refund" is strictly applicable *only if all charges for which the student is liable have already been paid*. Otherwise, any refund due will take the form of a corresponding reduction in the total liability on the bill.

Students who reduce the number of semester hours carried within the first 15 calendar days beginning with the first regularly scheduled class day may receive a refund of tuition and all fees not applicable to their new status, excluding student medical insurance. If the number of semester hours is reduced to fewer than 6, the student medical insurance may be refunded.

Students who reduce the number of semester hours carried (but remain enrolled in some course work) after the 15th day but no later than the 30th calendar day may receive a refund of 25 percent of the difference in tuition only. If the number of semester hours is reduced to fewer than 6, the student medical insurance may be refunded.

Part or all of a student's tuition and fees may be refunded because of a student's death, disability, or extreme hardship. The student, or in the event of a student's death, his or her family, must contact the Vice President for Student Affairs to request an adjustment of charges for tuition and fees and to receive a partial or full refund when university withdrawal is the consequence of one of the aforementioned circumstances. The student or his or her family will be required to provide documentation supporting the request. In the event of disability (medical withdrawal), medical documentation is to be sent to the University Health Service. In the event of a student's death or extreme hardship, documentation should accompany the request sent to the Vice President for Student Affairs. University withdrawal (i.e., withdrawal from courses) is an academic procedure that must be completed by the student's college advisement office. Contact with the Vice President for Student Affairs should be only for the purpose of seeking an adjustment of tuition and fees charges.

Students who have paid tuition and fees may receive a refund if they later receive scholarships which cover tuition and fees. The application for refund must be made no later than 60 days after the close of the term.

Students enrolled in courses of study over 15 miles from the campus which require their absence from the campus for *the entire semester* and who are residing over 15 miles from the campus may receive refunds of activity, student bus, health service, and athletic fees. To receive such a refund, students must apply to the Bursar within the first 15 calendar days beginning with the first regularly scheduled class day. Refunds will be processed after the sixth week of the semester.

Students who receive financial assistance and withdraw from the university after the 60 percent point in time of the period of enrollment may be required to repay a portion of their award(s) from any university refunds which they may have been eligible to receive. The exact amount to be repaid to financial aid accounts will be determined by the amount of aid received, the educational costs incurred, and the length of time attended during the semester.

Students enrolled in foreign study programs must adhere to the refund regulations stipulated by the Division of International Programs.

For answers to questions on tuition and fee payment refunds call (815) 753-1885, 8:15 a.m. to 4 p.m.

The above refund policies are subject to change.

Payment of Fees

It is the policy of Northern Illinois University to open an account for each of its students for the purpose of charging tuition and fees, room and board, textbooks and school supplies purchased through plans limited to financial aid recipients, and residence hall long distance telephone calls. Other charges incurred by a student such as parking fines, child care fees, and pharmacy charges may be added to the student's account. These charges, payments, other debits, and credits for financial aid, will appear on the monthly statement of account. Students are responsible for payment-in-full of their student account at NIU plus any additional costs which may be incurred by the university in the collection of the debt to NIU.

The amount due the university must be settled no later than the payment due date shown on the monthly statement of account. Through the NIU Credit Plan, the student is allowed to make up to three monthly payments for fall and spring semester costs charged to the student's account. For fall semester, the three payments are due in August, September, and October. For a spring semester, the three payments are due in January, February, and March. For a summer session, only two payments are allowed and are due in June and July. All students who choose to make such payments will be assessed a finance charge based on the terms and conditions of the NIU Credit Plan disclosed below.

The information about the NIU Credit Plan is accurate as of February 1, 2006. This information may have changed after that date. You should contact the Bursar's Office, Northern Illinois University, DeKalb, Illinois 60115 regarding any changes to the plan.

Students should understand the important information about the NIU Credit Plan that follows.

Annual percentage rate	13%
Minimum finance charge	$.50 whenever a finance charge is imposed
Grace period	If the new balance is paid in full by the payment due date indicated on your account statement, no finance charge will be assessed.[1]
Method of computing balance	Average daily balance (including current transactions during the last interest cycle)[2]
Late payment fee[3]	
Returned check fee	$25.00

[1]The exact number of days is determined each month by the Office of the Bursar. The payment due date will appear on each monthly statement of account.

[2]The finance charge is calculated by applying the periodic rate to the average daily balance of an account (including current transactions during the last interest cycle). The average daily balance is determined by dividing the sum of all daily balances from the interest cycle by the number of days in the interest cycle. The daily balance is computed by adding the new charges and other debits to the account's beginning balance and subtracting any payments, credits, and unpaid finance charges for that day of the interest cycle. The interest cycle begins the day following the assessment of finance charges and ends the day finance is assessed.

[3]If you reside in university housing, refer to your housing contract for additional information pertaining to penalties and assessments. Refer elsewhere in this catalog for other information pertaining to your enrollment at the university.

Illinois Residence Regulations

The tuition fee for in-state students is charged according to the definitions of residence below. Length of university attendance or continued presence in DeKalb during vacation periods is not considered proof of Illinois residence. The following is based upon *Regulations of the Board of Trustees*, a copy of which is available on the Internet at www.niu.edu/board/regs/botregtoc.shtml.

Adult Students. An adult student whose parents or guardians are Illinois residents and who lives with them or elsewhere in the state may be regarded as a resident, if the student's parents or guardians are bona fide residents of the state at the beginning of the term for which the student enrolls. An adult student whose parents are not Illinois residents may be considered a resident if the student has been a bona fide resident of the state for at least six consecutive months preceding the first class day of the term and continues to maintain that residence.

Minor Students. The residence of a student under 18 years of age is considered to be and to follow that of the student's parents. Self-supporting minors are subject to the same regulations as adults.

Exceptions

Marriage. If a nonresident student marries a resident, the nonresident can request reclassification as a resident before six months have elapsed. All other regulations pertaining to adult students apply.

International students. To be considered a resident, a student who is not a United States citizen must have "Permanent Resident" status or "Refugee" status with the U.S. Immigration and Naturalization service and must also comply with all other requirements of these regulations.

Armed forces personnel. The nonresident portion of the tuition will be waived for a person on active duty who is stationed and present in the state in connection with that service and who submits evidence of that service and station. Spouses and dependent children who live in the state are also eligible for waivers.

University staff and faculty members. Non-hourly staff members of the university, and faculty members of Illinois state-supported institutions of higher education, employed at least one-quarter time, and their spouses and dependent children, are considered residents. The term "staff members" does not include graduate assistants or student hourly workers.

Teachers. Teachers in the public and private elementary and secondary schools of Illinois may be assessed at the resident rate, during the term in which they hold appointment at least one quarter time.

A student who takes exception to the residence status assigned shall pay the tuition assessed, but may file a petition in writing to the Office of Registration and Records for reconsideration.

The written claim must be filed within 30 calendar days from the first class day of the semester for which the tuition is payable or the student loses all right to a change of status and adjustment of the tuition assessed for that semester.

Financial Aid and Scholarships

Student Financial Aid Office

The Student Financial Aid Office (SFAO) is responsible for administering and coordinating aid funds from federal, state, private, and university sources. The primary goal of the SFAO is to provide financial assistance to applicants who, without such aid, would be unable to attend NIU. In 2004-05, over 70 percent of the NIU students who were half time or more received some form of financial aid, totaling approximately $163.9 million.

A variety of financial aid is available to qualified students attending NIU. Programs, policies, and application procedures are defined in the NIU financial aid brochure, which may be obtained from the SFAO. Questions concerning financial assistance should be directed to this office or online at www.fa.niu.edu.

During the fall and spring semesters when school is in session, the SFAO service windows are open from 8:30 a.m. to 4 p.m., Monday through Friday. For further information on financial aid, call (815) 753-1395; for information on student loan processing, call (815) 753-8235 or visit the above-noted website.

Eligibility Requirements and General Application Procedures

An eligible applicant must

- be a citizen or permanent resident of the United States.
- be enrolled at least half time (6 or more semester hours at NIU) in a degree-seeking program. (Some programs are available to students carrying fewer than 6 semester hours.)
- not be in default on a Federal Perkins Loan, Federal Stafford Loan, Federal Parent Loan for Undergraduate Students, or Federal Supplemental Loan for Students.
- not owe a repayment to a grant program.
- make satisfactory academic progress toward a degree as defined by NIU.
- be aware that financial aid will not cover audit classes.
- agree to use any student financial aid received solely for educational expenses.

To apply for any type of financial aid, students must complete and submit the Free Application for Federal Student Aid (FAFSA) with NIU listed as one of their school choices. The FAFSA can be completed online at www.fafsa.ed.gov, or the paper application can be mailed in the envelope enclosed with the form.

The paper FAFSA can be obtained from high school and college counselors. Priority consideration will be given to applicants whose FAFSAs are complete by March 1 prior to the fall semester in which the applicant will attend NIU. All students will be required to meet university payment deadline dates regardless of the status of their financial aid.

Students who think they have special circumstances which could qualify them as being independent are advised to speak to a financial aid counselor in the SFAO.

Applicants for financial aid from NIU are considered for all programs for which they are eligible. Several types of aid may be combined or "packaged" to meet the student's computed financial need. Need is determined by subtracting the expected family contribution from the student's total educational expense. The parents' contribution is calculated on the basis of their income and assets as well as a consideration of family size, number of family members currently in college, retirement allowances, tax paid, and other allowable factors. The student is also expected to make a calculated contribution toward college expenses from income, savings, and other assets. A federal need analysis, called Federal Methodology, approved by the U.S. Congress, is used to evaluate a family's financial circumstances. A student who meets the independent student definition is evaluated on the basis of his or her (and spouse's, if applicable) financial circumstances.

Students must reapply for financial aid each academic year. The Student Financial Aid Office attempts to provide currently enrolled NIU students with information about applying for financial aid, but ultimately it is the student's responsibility to contact the SFAO regarding application procedures.

Depending on the availability of funds, some types of federal, state, and institutional aid may be available for students attending NIU's summer session. Only students who have submitted the FAFSA for the prior academic year are eligible for evaluation for financial aid for the summer session. Students interested in applying for summer session aid should contact the SFAO after March 15 to obtain application information and more specific guidelines.

Students who receive financial assistance and withdraw from the university before the 60 percent point in time of the period of enrollment may be required to repay a portion of their award(s) from any university refunds which they may have been eligible to receive. The exact amount to be repaid to financial aid accounts will be determined by the amount of aid received, the educational costs incurred, and the length of time attended during the semester.

Satisfactory Academic Progress for Undergraduates/Postgraduates

In accordance with the Higher Education Act of 1965, as amended by Congress, Northern Illinois University has established a satisfactory academic progress policy for undergraduates and postgraduates.

The current policy became effective during fall semester 2001. Students who became ineligible for financial aid before fall semester 2001 are required to contact the dean of their major college or the dean's designee to request a satisfactory academic progress (SAP) review.

Federal and state financial aid programs covered by this policy are the following: Pell Grant, Supplemental Educational Opportunity Grant (FSEOG), Perkins Loan, Work Study (FWS), Stafford Loan (Subsidized and Unsubsidized), NIU Grant, and other sources such as the Illinois Monetary Award Program (MAP), the Parent Loan for Undergraduate Students (PLUS), and certain alternative loans.

Students will be considered to be making satisfactory academic progress if they meet all of the following requirements. Failure to comply with any one may result in a loss of financial aid eligibility.

Rate of Completion Requirement

A student must successfully complete at least 67 per cent of the credit hours attempted after two terms of enrollment and subsequently each academic year. Earned A, B, C, D, P, and S grades are considered completed semester hours of credit. NIU withdrawals, incompletes, audits, and grades of F and U are not considered completed semester hours of credit. NIU withdrawals, incompletes, and courses repeated will be counted in the calculation of hours attempted. Audits are not included in the total number of semester hours attempted.

Grade Point Average Requirement

A student must maintain a cumulative GPA of 2.00 or higher after two terms of enrollment and subsequently each academic year. Failure to maintain the required GPA also has implications regarding academic status. For additional information on GPA and academic status, see "Academic Probation and Dismissal."

Maximum Time Frame Requirement

A student may receive financial aid until she or he has attempted 180 semester hours of credit from NIU and/or transfer schools. This policy will consider all terms of enrollment whether or not financial aid was received. Earned A, B, C, D, P, and S grades are considered completed semester hours of credit. NIU withdrawals, incompletes, audits, and grades of F and U are not considered completed semester hours of credit. NIU withdrawals, incompletes, and courses repeated will be counted in the calculation of hours attempted. Audits are not included in the total number of semester hours attempted. Students who fall into this category are immediately ineligible for financial aid. Such students may formally appeal their ineligibility for financial aid by following the guidelines under the "Appeal Procedures" section of this policy.

Evaluation

The satisfactory academic progress policy is in effect for each academic year of a student's enrollment. Satisfactory academic progress is evaluated after the completion of each term of enrollment. Students who have an unsuccessful term(s) will receive written notification of their current status. Evaluations are based on courses completed at NIU. NIU and transfer credits are used in the calculation of "Maximum Time Frame Requirement" and in the "Declaration of Major Requirement."

Failure to meet the "Rate of Completion Requirement" or "Grade Point Average Requirement" sections of this policy will result in the following.

Students not making satisfactory academic progress after two terms of enrollment will be placed on financial aid warning and sent a letter notifying them of their financial aid warning status. Students on financial aid warning may continue to receive financial aid for the next term of enrollment.

If the deficiency is not remedied by the end of this term, the student becomes ineligible for financial aid. The student's awards are placed on hold, and he or she will receive a second written notification of lack of progress. Students at this stage must consult with the dean of their major college or the dean's designee. Students who have no college affiliation must consult with the Vice Provost (or the Vice Provost's designee). Financial aid will not be released unless the Student Financial Aid Office is notified in writing by the dean of the student's major college or the dean's designee or the Vice Provost (or the Vice Provost's designee) that consultation has occurred.

If the deficiency is not remedied by the end of the next term of enrollment, the student again becomes ineligible for financial aid and will be so notified. Students may formally appeal their ineligibility for financial aid. If the appeal is approved, the student will then be awarded financial aid for another term of enrollment.

Appeal Procedures

Appeals must be submitted in writing to the Student Financial Aid Office and must include a written review from the dean of the student's major college or the dean's designee. Federal regulations restrict those circumstances that may enable an appeal to be successful. The Student Financial Aid Office considers these regulations, the student's written appeal, and the dean's evaluation when making a final determination.

Federal/State Assistance

Federal

Federal Pell Grant.* This grant helps first-time undergraduates pay for their education after high school. Eligibility is determined from information reported on the FAFSA.

Federal Perkins Loan.* This is a low-interest loan for first-time undergraduates attending full time. The amount a student may receive depends on financial need, amount of other aid received, and the availability of funds at NIU.

Federal PLUS* (Parent Loan for Undergraduate Students). Applications are available from a variety of lenders.

Federal Stafford Loan.* This is a fixed interest loan made to both undergraduate and graduate students attending school at least half time. Students ineligible for (or ineligible for the full amount of) Subsidized Federal Stafford Loan have an option to borrow an Unsubsidized Federal Stafford Loan. Subsidized Federal Stafford Loans are based on financial need, and the federal government pays the interest during in-school and deferment periods. Unsubsidized Federal Stafford Loans are not based on financial need, and the student is responsible for paying the interest from the date the funds are disbursed.

Federal Supplemental Educational Opportunity Grant.* This grant is for first-time undergraduates attending full time. The amount awarded to recipients depends on financial need, the amount of other aid received, and the availability of funds at NIU.

Veterans Assistance. The Veterans Assistance Office provides a liaison between the U.S. Department of Veterans Affairs and student veterans and the dependents of deceased veterans regarding their educational benefits. The office assists veterans, their widows or widowers, and their minor dependents in the processing of their applications and certification of their enrollment. Assistance is also provided when difficulties arise concerning receipt of the benefits for which students are eligible. Applications are also available for the Illinois Veterans' Grant, the Illinois National Guard Grant, and the Illinois MIA/POW Scholarship.

Incoming veterans are advised to contact the Veterans Assistance Office at least 45 days prior to the start of the semester to complete paperwork to receive their benefits. Veterans receiving benefits must complete an Enrollment Certification Request Form each semester and notify the Veterans Assistance Office of all changes in enrollment. Inquiries concerning educational benefits for veterans and their dependents may be directed to the Veterans Assistance Office, Northern Illinois University, DeKalb, Illinois 60115-2872, (815) 753-0691 or online at www.fa.niu.edu and click on veterans assistance. Office hours are noon - 4 p.m., Monday through Friday.

State

General Assembly Scholarship. This scholarship covers tuition and activity fee charges and is usually awarded one year at a time. A competitive examination may be given to determine eligibility. The student must be a resident of the district from which he or she hopes to obtain the scholarship. Interested students should contact their state representative or senator.

* Eligibility for this grant, loan, award, or student employment program is considered after both the NIU Financial Aid Verification Form and the Free Application for Federal Student Aid (FAFSA) have been filed.

Illinois Department of Human Services, Department of Rehabilitation Services. This office provides rehabilitation services to individuals with a significant disability to enable them to engage in an occupation leading to competitive employment. These services may include financial assistance for all or part of the tuition and fees and/or the student's maintenance costs while they are in attendance at an accredited postsecondary institution. For detailed information and application assistance, write to the Illinois Department of Human Services, Department of Rehabilitation Services, 623 E. Adams Street, P.O. Box 19429, Springfield, IL 62794-9429.

Illinois National Guard Grant. Any enlisted person who is actively serving in the Army, Air National Guard, or Illinois Naval Militia may qualify for financial assistance benefits. Students should contact their military unit and the SFAO for further information.

Illinois State Monetary Award Program.* This program is available from the state of Illinois for Illinois residents who are first-time undergraduates. Awards are made based on information reported on the FAFSA. The maximum award covers tuition and mandatory fees.

Illinois Veteran Grant. A veteran who was a resident of Illinois both before and after one year or more of active duty, and received other than a dishonorable discharge may qualify for the Illinois Veteran Grant.

Merit Recognition Scholarship. These scholarships are available to applicants in the top five percent of each Illinois high school graduating class. An award of up to $1,000 is given to students nominated by their high school counselor. Recipients must enroll for at least 6 semester hours for two terms each academic year, plus receive a 2.50 GPA, to qualify for the one year non-renewable award.

State Special Education Scholarships. These scholarships are available to undergraduate and graduate students seeking initial teacher certification in any area of special education. The scholarship is valid for not more than four years of attendance within a six-year period and carries an obligation to teach in Illinois two of five years following graduation. For more information, interested persons should contact ISAC at www.collegezone.com.

Also see "Scholarships and Academic Awards" on the following pages.

Private/External Scholarships

Private scholarships are awards provided by donors outside the university such as civic, fraternal, professional, education, and religious groups/organizations, private foundations, corporations, and employers of parents. The Student Financial Aid Office scholarship adviser, high school counselors, library reference books, and the Internet are good reference sources for assistance in locating private scholarships. Questions regarding the processing of private/external scholarship funds should be referred to the Student Financial Aid Office scholarship adviser. The Student Financial Aid Office administers the disbursement to students of scholarship funds provided by private/external donors.

Also see "Scholarships and Academic Awards" to learn about NIU awarded scholarships.

Student Employment*

A variety of part-time employment under the regular student employment and Federal Work-Study programs is available to NIU students. Jobs are available through the residence halls, the University Libraries, Holmes Student Center, and most university departments where typists and clerical workers are hired.

The 1986 Immigration Reform and Control Act mandates that any person employed by Northern Illinois University after November 6, 1986, must be either a U.S. citizen or possess *current* employment authorization from the U.S. Immigration and Naturalization Service. Student employees must be prepared to present original documentation to the Student Employment Office prior to the start of their employment contract. For more information, contact the Student Employment Office (753-1394).

Tuition Waivers for Senior Citizens

Anyone 65 years of age or older whose annual income is under $21,218 is eligible to take credit courses tuition free. The student must pay all general university fees and any course-related fees. Available classroom space must exist and tuition-paying students enrolled must constitute the minimum number of required students for the particular class except for credit courses designed specifically for senior citizens. Interested senior citizens should contact the Student Financial Aid Office.

Scholarships and Academic Awards

College of Business

Undergraduate Studies in Business

Ruth G. Hart Memorial Scholarship
Herb Eldean Endowed Fund
CNA/Azel Carter Memorial Scholarship Fund
David & Linda Nelson Endowed Business Scholarship
NIU Executive Club Endowed Scholarship
Randall N. Beck Memorial Scholarship
Dennis and Stacey Barsema Endowed Scholarship in Business
David & Diane Graf College of Business Rockford Endowed Scholarship
Talented Minority Scholarship
Leslie A. Holmes Memorial Fund - Endowed
Horvath Family Fund
Donald R. Larson Endowed Scholarship

Department of Accountancy[1]

Accountancy Faculty Undergraduate Scholarship
Arthur J. Krupp Scholarship
BDO Seidman LLP
Beta Alpha Psi
BP Products Scholarship
Brian Deets Memorial Endowment in Accountancy
Caterpillar Scholarship
Clifton Gunderson LLP Scholarship
Crowe Chizek & Co. LLP Scholarship
DeLoitte LLP Scholarship
Donald & Donna Kieso Scholarship
Ernst & Young LLP Scholarship
Federation of Schools Accountancy Award
Financial Executives Institute–Fox Rock Chapter Scholarship
Garelli, Wong & Associates Scholarship
Grant Thornton LLP Scholarship
Hartmarx Corporation Scholarship
HSBC Scholarship
IMA – Rockford Chapter Scholarship
Institute of Internal Auditors - Chicago Chapter
James & Kathy Hendricks Scholarship
KPMG LLP Scholarship
McGladrey Inc. Scholarship
Michael and Patricia Stradon Scholarship

*Eligibility for this grant, loan, award, or student employment program is considered after both the NIU Financial Aid Verification Form and the Free Application for Federal Student Aid (FAFSA) have been filed.
[1]Students do not apply for these awards which are for upper-level accountancy majors. All eligible students are considered based on GPA and leadership.

Miller Cooper & Co. Ltd. Scholarship
Motorola Scholarship
National Association of Black Accountants Service Award
Patrick R. Delaney Endowed Accountancy Scholarship
Plante & Morgan PPLC Scholarship
PricewaterhouseCoopers LLP Scholarship
Reznick Group Scholarship
Ryan & Co. Scholarship
Sikich Gardner & Co. LLP Scholarship
SpearMC Management Scholarship
Student Accountancy Society Service Award
Warady + Davis LLP Scholarship
Wolf & Company LLP Scholarship

Department of Finance

Financial Executive Institute–Fox Rock Chapter
Security Traders Association of Chicago
National Bank & Trust of Sycamore
Clifford Danielson Scholarship
Financial Executives Institute of Chicago (FEI)
William Wilbur Endowed Scholarship

Department of Management

Management Departmental Scholarship
Gladys M. Bahr Memorial Fund
International Business Seminars Scholarship
Management Alumni Scholarship

Department of Marketing

Dr. A.H. (Cary) Kizilbash Memorial Award
CDW Sales Award
Michael T. McSweeney Direct Marketing Student Award
Project Leadership Associates Marketing Scholarship
Walgreens Scholarship
Marketing Achievement Award
International Marketing Award
Marketing Scholar Award
OTA/Off the Record Research Scholarship
Outstanding Future Alumni Award Given by Alumnus Jim Planey
Outstanding Selling Award
Aspiring Entrepreneur Award
Careerbuilder.com Scholarship
The Effner Financial Group Award
Philip G. Cohen Memorial Award
Pi Sigma Epsilon – Gamma Zeta Scholarship
Vector Sales Award
Wesley J. Welch Memorial Award

Department of Operations Management and Information Systems

Boise Office Solutions Scholarship
Caterpillar Scholarship
CON-WAY Logistics Scholarship
Matthew L. Johnson Scholarship
OMIS Alumni Scholarship
OMIS Faculty Undergraduate Scholarship
OMIS Outstanding Undergraduate Student Award
Pella Corporation Scholarship

College of Education

John H. Johansen Scholarship in Education
Jessie Griffith Memorial Scholarship
Rista Simich Memorial Education Fund
Orville Jones Memorial International Scholarship
Maureen McLaughlin Deveraux Scholarship Fund
Raymond M. Haas and Harriet Cords Harrington Haas Scholarship Fund
Thomas R. and Shirley Klein Scott Scholarship Fund
Eunice B. Schwemm Scholarship Fund
Julia Calliss Morris Scholarship
Penelope (Penny Fike) Cameron College of Education Scholarship Fund
Teacher Education Scholarship
Dr. Ernest E. Hanson Memorial Scholarship
Earl and Margaret Hoffman Endowed Scholarship in Elementary Education
Circle of Gold – Classes of 1949, 1950, 1951 Scholarship
Norman S. and Marion D. Gilbert Endowed Scholarship in Education
Laurence A. Mack Memorial Scholarship Fund
Martin H. & Verna Conklin Bartels Memorial Scholarship Fund in Education
Dorothy A. (neé Studnicka) and Glenn E. Erickson Scholarship Fund
Donald R. Millette Endowed Scholarship Fund
Leslie A. Holmes Memorial Fund – Endowed
Horvath Family Fund

Department of Kinesiology and Physical Education

Miriam Anderson Scholarship
Lela Trager Scholarship
Elizabeth A. Patterson Scholarship
Margaret May Duncan Scholarship
Physical Education Scholarship
Stroup-Dunn Scholarship
Lou Jean Moyer Scholarship
Al Kranz Student Athletic Trainer Scholarship
Judith A. Bischoff Scholarship

Department of Teaching and Learning

Lawrence B. Hapeman Scholarship
Iris Adam Memorial Endowment Fund
Harold W. “Rip” Collins Scholarship
Helen Kirby Tink Scholarship

Office of Recruitment Services

Golden Apple Scholars Tuition Scholarship
Golden Apple Scholars Pathway Scholars
Project Prime Award
Project Prime Scholarship
Mary F. English Technology Award

College of Engineering and Engineering Technology

Max Zar Scholarship in Engineering
Carter-Rodriguez Scholarship for Women in Engineering
Arthur D. and Florence S. Graffam Engineering Technology Scholarship
Romualdas and Nijole Kasuba Scholarship
Leadership Tuition Program for Women and Minorities
Dean’s Diversity Scholarship for Freshmen and Transfers
Energy Systems Group Scholarship Award in Engineering
Engineering and Technology Alumni Society Endowed Scholarship
“Doc” and Betty Newell Scholarship

Department of Electrical Engineering

S. N. Shure Brothers Electrical Engineering Scholarship
Omron Fdn. Electronic Engineering Scholarship
AOC Scholarship

Department of Technology

Society of Manufacturing Engineers
American Society of Safety Engineers
Society of Plastic Engineers

College of Health and Human Sciences

Izzo-Inge Family Award for Students with Disabilities

School of Allied Health Professions

School of Allied Health Professions Scholarship

Department of Communicative Disorders
Joan Good Erickson Undergraduate Clinical Interest Award
Cletus G. Fisher Award

School of Family, Consumer, and Nutrition Sciences
Kappa Omicron Nu Scholarship
Celine Neptune Scholarship
Fashion Industries Organization Scholarship
Georgiana W. Sie Memorial Fund
Helen Gum Westlake and Donald G. Westlake Scholarship for Family Life Studies
Early Childhood Studies Student Teaching Scholarship
Hyatt International Scholarship
Marriott International Scholarship

Department of Military Science
Ruth Ashelford Pollock Scholarship
Illinois State Army ROTC Tuition Waiver
Illinois State Army ROTC Housing Waiver
Army 2yr/3yr/4yr Federal ROTC Scholarship
Army ROTC Nursing Scholarship

School of Nursing
Annette Lefkowitz Fund for Nursing Research
Dr. Irving & Roseanne Krcek Frank Scholarship in Nursing
Marian Frerichs Nursing Scholarship Fund
Jane Richards Scholarship Fund
Harold W. Finney and Janet P. Finney Medical Memorial Scholarship Fund
Gisela Wenner Nursing Scholarship
Ruth Hall Nursing Endowed Scholarship
Leslie A. Holmes Scholarship
Frank Nursing Student Scholarship
Sarah Fuller Memorial Scholarship
Leslie A. Holmes Memorial Fund - Endowed

College of Liberal Arts and Sciences

Department of Biological Sciences
Harvey A. Feyerherm Award
Dr. August M. Gorenz Scholarship
David R. Layman Scholarship Fund
Amanda Mangold Scholarship
George L. Terwilliger Memorial Scholarship Fund–Endowed
Charles E. Montgomery Award
Jerrold H. Zar Scholarship Award
Alumni Scholarship

Department of Chemistry and Biochemistry
Chemistry Alumni Undergraduate Scholarship Fund
NIU Chemistry Club Ed Hyland Award
Rosalie Reynolds Memorial Scholarship in Chemistry
Van Acker-Duminy-Kovarik Scholarship Fund

Department of Communication
Albert Walker Award
Donald R. Grubb Scholarship Fund
John Clogston Memorial Scholarship
Scripps League Scholarship
Public Relations Student Society (PRSSA) of America Award Fund
Illinois Journalist of the Year Student Scholarship
Irvan J. Kummerfeldt Scholarship for Print or Broadcast News
Ann Nelson Nahas Scholarship
NIU Media Award
Northern Illinois Newspaper Association Scholarship for Print & Photojournalism
Hallie Hamilton Scholarship for Photojournalism
Granville and Eleanor Price Scholarship Fund for Print News
Van Sells Endowment in Communication
Forensics Tuition Scholarship
Margaret Louise Wood Rhetoric Scholarship
Kenneth Smith Memorial Award
Jennifer Ettema Scholarship

Department of Computer Science
Horvath Family Fund
AG Communication Scholarship
Evelyn Nelson Scholarship
Elizabeth J. Schwantes Undergraduate Scholars Fund

Department of Economics
Skeels Scholarship in Economics

Department of English
Jeannie A. Hainds English Endowment
Lynne Waldeland Scholarship in English
Rosalie Hewitt Scholarship Fund in English
Charles W. Hagelman Jr. Scholarship Fund
David and Linda Nelson Endowed English Scholarship
Richard H. Howland Scholarship Fund
Russell & Jeanne Durning Family Fund–Endowed
S. Orville and Adra Baker English Scholarship
John C. and Judith M. Gurley Endowed English Scholarship
Maude Uhland Award
Queen Victoria Hardison Award
Mae Thomas Award
Robert T. Self Award in Literature and Film
Orville Baker Essay Award
Gustaaf V. Van Cromphout Scholarship

Department of Foreign Languages and Literatures
Joseph Suhadolc Memorial Scholarship Fund
Levin, Jachman, Greenberg, and Wagman Overseas Scholarship Fund
Lillian Pauleen Cobb Endowment Fund

Department of Geography
Richard E. Dahlberg Scholarship Fund
Elizabeth J. Schwantes Undergraduate Scholars Fund

Department of Geology and Environmental Geosciences
Ira Edgar Odom Endowed Fund
Malcolm P. Weiss Endowed Fund

Department of History
James R. Shirley History Endowment
J. Patrick White History Education Endowment
Oscar Matasar Scholarship
Jeannie A. Hainds Scholarship
Hugh Jameson Essay Contest
Undergraduate Capstone Paper Prize
Outstanding History Student Award

Department of Mathematical Sciences
Margariete Montaque Wheeler Memorial Fund
Gail Masters Gallagher Memorial Scholarship Fund
Donald R. Ostberg–Mathematics Memorial Fund–Endowed
Mathematical Sciences Incoming Student Award
Dorothy A. (neé Studnicka) and Glenn E. Erickson Scholarship Fund
Horvath Family Fund

Department of Philosophy
Sherman M. Stanage Expendable Scholarship

Department of Physics
Eaton-Miner Physics Education Fund

Department of Political Science
Joe R. Wilkinson Memorial Fund–Endowed
Inez Nelson Family Endowed Scholarship
Kevin McKeogh Award
Outstanding Undergraduate Paper Award

Department of Psychology
A. Bond and Margaret F. Woodruff Scholarship Fund–Psychology
Outstanding Undergraduate Research/Scholar Award
Elizabeth J. Schwantes Undergraduate Scholars Fund

Department of Sociology
James L. Massey Social Justice Award
David P. Street Memorial Fund

College of Visual and Performing Arts

Lester Trilla Scholarship
College of Visual and Performing Arts Endowed Scholarship Fund
Sally Stevens Arts Scholarship
O'Malley-Pugh Endowed Scholarship

School of Art
Jack & Eleanor Olson Art Scholarship
Richard A. Keefer Art Scholarship Fund–Endowed
James P. Bates Memorial Scholarship
Jack and Margaret Arends Scholarship
Peg Bond Art Education Scholarship
Caroline Allrutz Scholarship
Dimitri Liakos Endowment in Art History
John X. Koznarek Memorial Scholarship Fund–Endowed
Cora Miner Art Scholarship Fund–Endowed
Helen Merritt Art Scholarship
Frances Gates Memorial Art Scholarship Fund–Endowed
School of Art Tuition Scholarship for Incoming Freshmen
Jim Asbury Memorial Art Scholarship
Chicago Book Club Scholarship
Sally Stevens Arts Scholarship
Dorothea Bilder Scholarship
O'Malley-Pugh Endowed Scholarship

School of Music
Charles Baker Memorial Scholarship Fund
Earl and Margaret Hoffmann Endowed Student Scholarship in Music
William M. and Ruth H. Koehler Scholarship Fund
A. Bond and Margaret F. Woodruff Fund
Lynne Waldeland Scholarship in Vocal Music
Alfred L. and Shirley K. Tobias Scholarship Fund
Paul Busija Memorial Fund
Reynolds Whitney Memorial Endowment
Richard A. Keefer Music Scholarship Fund
Farny R. Wurlitzer Music Scholarship Fund
Ronald J. Modell Scholarship in Jazz Studies
Maude Nicholson Music Scholarship Fund
Herbert Weiner Memorial Expendable Scholarship in Music
Janet and A. Oscar Haugland Scholarship
Samuel E. & Bertha Glidden Bradt Endowment
Kolze-Rasmussen Music Scholarship
Wilbur and Dorothy Smith Clarinet Scholarship
Jane Jenkins Lovering Memorial Scholarship Fund
Brody Family Endowment
Lester Trilla Scholarship
School of Music Tuition Scholarship
Sally Stevens Arts Scholarship
Constance Eloise Aagesen Scholarship Fund
Norman S. and Marion D. Gilbert Endowed Scholarship
Wilber Pursley Endowed Scholarship in Music
Jerrold H. Zar Endowed Scholarship in Trumpet Studies
O'Malley-Pugh Endowed Scholarship
Donald Walker Living Legacy Scholarship
Lester K. Smith Creative Music Scholarship
Robert R. and Frances A. Green Scholarship in Music

School of Theatre and Dance
Sydney Smith Memorial Fund–Endowed
Lili and John La Tourette Scholarship for Theatre
Lila Hellier-Dole Dance Scholarship
Rene LeBeau '87 Memorial Scholarship
Adra and Orville Baker Theatre Scholarship
School of Theatre/Dance Talented Student Tuition Scholarship
Sally Stevens Arts Scholarship

Other Units

Alumni Association
Alumni High School Merit Scholarship
Everett L. and Helen O. Marshall Scholarship
Alumni Merit Scholarship
Elzo T. and Helen R. Schutt Quasi-Endowed Scholarship

Campus Child Care Center
Anne Kaplan Fund

Career Services
Richard B. Fisher Scholars Program/Morgan Stanley Dean Whitter
Career Services Student of the Month Recognition Scholarship
Career Services Student of the Year Silver Award
Career Services Student of the Year Gold Award
Career Services Student of the Year Bronze Award

Center for Black Studies
Center for Black Studies Book Scholarship

Center for Latino and Latin American Studies
Robert Marcelin Memorial Scholarship

CHANCE
CHANCE Tuition Scholarship

Intercollegiate Athletics
David & Carolyn Witheft Student Athlete Scholarship Fund
Glyn E. Barron Memorial Scholarship
Ralph J. Thomas Scholarship Fund
Gullikson Education Fund
Gary L. Whisler Memorial Football Scholarship Fund
William (Bill) Johnson Memorial Fund
Illinois Women's Golf Association Scholarship Fund
John Tucker Memorial Fund
Howard Fletcher Football Scholarship Fund
Carl Appell Memorial Scholarship
Broderick-Andres Award
Baynas Football Scholarship Fund
Castle Bank N.A. Scholarship Fund
Al Kranz Student Athletic Trainer Scholarship
Dr. W.L. Moore Memorial Scholarship
Mike Spinello Golf Scholarship
Jack Pheanis Scholarship
James Schwarzbach Scholarship Fund
Lloyd Deveraux Scholarship Fund
Debora J. Korcek Memorial Scholarship
Grant-in-Aid Scholarship
Len and Anneda "Sis" Jacobson Memorial Scholarship
John and Kathryn Groth Scholarship
Reese Leadership Award

International Programs
Clara Sperling Memorial Scholarship
John and Lili La Tourette International Studies Scholarship

Northern Star
Kathy Orr McDonald Memorial Award for Editorial Excellence
Campbell-Thompson *Northern Star* Scholarship

Ryan Byrne Memorial Award
David Onak Scholarship

Office of Admissions
Centennial Scholarship
Alumni High School Merit Scholarship

Office of the Scholarship Coordinator
Alverda A. Bastian Scholarship
Andre D. Bohanon Memorial Scholarship
Presidential Scholarship for Minority Students
Anna Larson and Mary Jane Larson Baird Scholarship Fund
James Fletcher Memorial Scholarship Program
Kathleen M. Callahan Love for a Lifetime Scholarship
Jeanette M. Doweiko Memorial Scholarship
Ari and Ruth Kovacevich Distinguished Scholarship
Woodstock Center Endowment Fund
John Reed Dunn Memorial Endowed Scholarship
Wheeler Memorial Endowed Scholarship
Beryl James Scholarship Fund
Joseph and Rosa Costa Endowed Scholarship
Financial Need Tuition Scholarship

Office of Student Financial Aid
Karl L. Adams Scholarship
Lora and Warner Pomrene Scholarship
Gladys Brooks Beltzer Memorial Scholarship
Maurine Bloomster Coxhead Endowed Scholarship
M.C. Hayes Endowed Scholarship Fund
Irene V. Crofton Scholarship Fund
Wayne E. McCleery Award
Grace E. Nix Fund
Class of 1960 Scholarship
Mary Williams Memorial Fund
Janis Priede Memorial Scholarship Fund–Endowed
Helen R. Messenger Scholarship
Dolores (Lorry) C. Lamb Scholarship Fund
Josephine Jandell Fund
Melvin Ben Wilson Memorial Fund
Orla Grace Triteline Scholarship Fund–Endowed
Nettie and Jessie Ggrov Foundation
Nancy B. Hall Scholarship
Harriet Wilson Davy Scholarship

Operating Staff Council
Operating Staff Dependent Award

Student Involvement and Leadership Development
Marett Endowed Greek Campus Leadership Scholarship Fund
Parents' Association Endowed Scholarship

University Honors Program
Dick Noreen Honors Scholarship
Honors Program Peer Advisor/Community Leader Fellowships

University Libraries
Katherine Walker Library Work Scholar Award

University Scholarships Committee
Phi Theta Kappa Scholarship
Academic Finalist Award
Faculty Fund Academic Finalist Scholarship and Faculty Merit Scholar
James L. Massey Honors Scholarship
University Scholar Award for Community College Transfer Students
University Scholar Award
Academic Affairs Tuition Dollar Finalist Award
Regents Scholar Award
Scholarship Committee Tuition Waiver

University Services

Holmes Student Center

The Holmes Student Center provides recreational facilities, informal gathering places, eating places, meeting and conference rooms, and a 80-room hotel for members of the university community and their guests. Included are the Duke Ellington Ballroom and Sandburg Auditorium for major performances and lectures; Diversions, a multipurpose facility for coffeehouse and club-style live entertainment; the Center Gallery, which displays art works of many student artists; the University ID Office; two computer laboratories are available for use by all NIU students; the Huskies Den, which offers electronic games, billiard tables, and a 16-lane bowling center; and the University Bookstore which sells textbooks, general books, school and art supplies, and personal items.

Tickets to most campus events may be acquired or purchased in the center. The facility provides copy machines, a full-service bank, and Automatic Teller Machines. Students can cash checks, study in the Gallery Lounge, or relax in the television lounge. At the Holmes Center information desk, students can purchase newspapers and get directions and information on events and activities in the center.

Housing

Campus Living

NIU offers accommodating living arrangements for undergraduate students in its university residence halls. Living on campus gives students quick access to the Huskie Bus line, hot meals seven days a week, a variety of living options, and a supportive academic environment.

The university residence halls are an affordable option for undergraduate students. The residence halls include every utility, including cable, Internet, heat, gas, water, garbage, electric, and a university-wide phone (caller ID, voice mail). Each residence hall has a computer lab open 24/7 to meet the needs of students. Lobbies and common areas are equipped with wireless Internet and each residence hall room has its own high-speed Internet connection. Other amenities available to hall residents include quiet study lounges, 24-hour security, on-site laundry, vending machines, and photocopiers.

A contract to live in the residence halls comes complete with a meal plan for the semester in three incremental weekly amounts. Residents can choose to eat in any of the dining units in the halls, including à la carte food courts, all-you-care-to-eat buffets, and grab ‘n go stores. There is a dining option available to residents from 7:00 a.m. until 11:00 p.m. five days a week, with weekend hours varying. Each residence hall room also comes equipped with a refrigerator/freezer/microwave for in-room meal preparation.

A unique aspect of living in the University Residence Halls is the supportive academic environment found on each floor. From the support of the floor’s community advisor to the specialized programs found in Academic Residential Programs (ARPs). Academic Residential Programs are specialized communities designed to strengthen the connection between students and faculty within a chosen course of study. NIU offers the following ARPs: Business Careers, Health Professions, Hearing Impaired Interest, Honors, Science/Engineering/Technology, Teacher Education and Certification, Fine Arts, and International. First-year students also benefit from the First Year Residential Experience, located in Grant Towers.

Residence hall contracts cover the entire academic year with optional interim contracts available during the winter and spring break periods. Summer housing is also available. Applications are available from Housing & Dining, located in East Neptune Hall. Housing & Dining can be reached at 815-753-1525 or online at www.housing-dining.niu.edu.

Health Services

Health Services offers a wide variety of high quality, out-patient health care services to NIU students to assist with maintaining and improving their health. Health Services physicians, nurse practitioners, nurses, and other professional and support staff have extensive experience in college health and are sensitive to the special needs of the college community. Health Services physicians are trained and experienced in primary care specialties. The high quality of care provided by Health Services is recognized through accreditation by the Accreditation Association for Ambulatory Health Care, Inc.

Health Services is available to all full- or part-time students who are currently enrolled on the DeKalb campus and have been assessed on-campus student (activity) fees. There are no charges for physician or provider services, x-rays, most laboratory tests, physical therapy, and most other services. There are charges for medications, immunizations, specialized medical procedures and supplies, selected laboratory tests, and missed appointments. Students may use Health Services without being enrolled in the university’s Student Health Insurance Plan or a private health insurance plan.

Health Services provides the following.

Acute Care–services for injuries and acute illnesses including selected minor surgical procedures.

Allergy Injections-using the schedule and serum provided by the student’s allergist.

General Medical–assessment and treatment of acute and chronic medical conditions.

Laboratory–a full range of laboratory testing is available.

Men’s Health–male health exams, screening and treatment, with an emphasis on prevention and personal responsibility.

Nutrition–counseling regarding general and specialized nutrition needs including weight management and eating disorders.

Pharmacy–filling of prescriptions from physicians, advanced practice nurses, physician assistants, dentists, or oral surgeons.

Physical Therapy–treatment and rehabilitation of acute injuries and chronic disabilities upon physician referral.

Preventive Medicine–immunizations (including hepatitis B and meningococcal meningitis vaccines), HIV testing, travel immunizations and information, and tuberculosis testing.

Psychiatry–individual out-patient psychiatric evaluation, medication therapy, and/or referral.

Radiology–general diagnostic x-ray examinations, fluoroscope, and sport medicine studies, as well as electrocardiography (EKGs) ordered by Health Services physicians.

Women’s Health–thoughtful, private care and management of women’s health issues with emphasis on prevention and personal responsibility

Appointments are required for medical, nutrition, physical therapy, psychiatry, men's and women's health visits, and for some services in Preventive Medicine. Fees are charged for missed appointments. To schedule or cancel an appointment, call (815) 753-1311. For Preventive Medicine appointments, call 753-9759.

Students are responsible for the cost of all health care services received outside Health Services, including referrals. The university offers an affordable Student Health Insurance Plan that assists students with paying these medical expenses. For more information regarding this insurance plan, call the Student Insurance Office at (815) 753-0122. For additional information regarding Health Services, call (815) 753-1311.

Student Health Insurance

Students who register for 9 or more semester hours on-campus in DeKalb by the 30th calendar day of the semester are automatically assessed the fee for student insurance on their tuition account through the Bursar's Office. The student insurance plan provides coverage for hospitalization and/or medical treatment for injury and sicknesses 24 hours a day anywhere in the world.

Students enrolled for 6-8 semester hours may elect to purchase student insurance. Student insurance is also available by application to students enrolled for 6 or more semester hours at regional sites. Students wanting this option must apply in person to the Student Insurance Office by the 15th calendar day of the semester to enroll for coverage.

All international students and students studying abroad are required to carry the student insurance. These students are automatically charged the fee for student insurance if they register for at least one semester hour by the 30th calendar day of the semester.

Eligible dependents of insured students, including spouse and unmarried children, may also be insured. The insured student may apply for dependent coverage at the Student Insurance Office on or before the 15th calendar day of the semester.

Students who have been assessed the student insurance fee may apply for cancellation by completing the on-line Academic Year Waiver Process on or before the 15th calendar day of the semester. Reinstatement is available during open enrollment periods or within 60 days of being removed from alternate coverage. Contact the Student Insurance Office for information. Students who successfully complete the waiver process fall semester are not assessed or covered by student insurance for the following spring semester.

Students (and their dependents) who are insured for the spring semester are automatically covered through the summer whether or not they enroll in the summer session. New students entering the university for summer session who are registered for 6 or more semester hours may elect to purchase student insurance for themselves and their dependents by making application at the Student Insurance Office during the first five days of the summer session.

Students who withdraw from the university due to medical reasons must immediately contact the University Health Service and the Office of Student Affairs as well as their college advisement office if they have paid for and wish to retain their student insurance coverage. For information regarding refunds, see "Refund Policies."

Information concerning the health insurance may be obtained from the Student Insurance Office located in Health Services, Room 201 (753-0122).

Service Centers, Offices, and Agencies

ACCESS Tutoring Programs

ACCESS provides campus-wide academic support and tutoring to undergraduates through Peer Assisted Learning (PAL) and Supplemental Instruction (SI). PAL offers free, individualized appointment-based tutoring in most 100- and 200-level general education courses. PAL also has walk-in tutoring centers in Douglas, Lincoln, and Grant. Appointments are not required and the centers are open to all undergraduate students. SI is an enhanced tutoring program offered in specific sections of some courses. Student tutors called SI leaders attend class with students and hold regularly scheduled out-of-class study sessions to help students learn more effectively.

Additional programs may be offered as needed each semester. For further information, contact PAL at 753-0499 or SI at 753-1141. Visit the web for more information, courses tutored, and schedules for tutoring centers and SI sessions at www.tutoring.niu.edu.

Asian American Center

NIU's Asian American Center provides student-centered services to a growing Asian American student population, which is comprised of many ethnicities including, but not limited to, Burmese, Cambodian, Chinese, Filipino, Hmong, Indian, Indonesian, Japanese, Korean, Laotian, Malaysian, Pakistani, Taiwanese, and Vietnamese. In support of the academic missions of NIU and the Division of Student Affairs, the center assists in the recruitment and retention of Asian American students and provides diverse educational, cultural, and social activities designed to raise awareness about Asian American heritage and culture. The center creates an inclusive and welcoming environment that intentionally enhances students' learning experiences, leadership development, and career preparation. It also provides students with a computer lab, a resource library, meeting rooms, and extended hours during final examinations.

Campus Child Care

Campus Child Care is a licensed facility which offers NIU students, faculty, and staff full- and part-time child care for their children ages 2 months - 5 years. In addition, school-age childcare is available during the summer session. The center is accredited by the National Academy of Early Childhood Programs, which serves as an indicator of a high-quality program. The center is staffed with qualified teachers along with student workers who serve as teacher aides in the classrooms. The center is open Monday through Friday, 7:15 a.m. to 5:45 p.m. during the fall, spring, and summer sessions. Full-time child care is also available between semesters for those who need year-round child care. For more information, contact Campus Child Care at 753-0125.

Career Services

Career Services helps undergraduate students secure internships and full-time employment through a centralized department serving all the colleges, departments, and majors. Career counselors are available to assist NIU undergraduate students make career decisions, discuss career transitioning and develop plans to build "experience" into their educational program through internships, and search for part-time and full-time employment.

Besides offering individual career counseling about career and job-related concerns, the following services are offered through Career Services.

- Help with career decision making including a website for majors, with corresponding career options, at www.niu.edu/careerservices/Weblinks/
- Online postings for internships and full-time positions through Victor eRecruiting at www.niu.edu/careerservices

- Walk-in and online resume and cover letter reviews
- Career testing
- University-wide job fairs, internship fairs, and Educators' Job Fair
- Assistance in the application process for graduate/professional school
- Permanent credential files for students in the field of education
- A Career Resource Center containing a library of books, brochures, and directories describing various careers, as well as computers that can be used in job search and resume/cover letter preparation

Career Services is located in the Campus Life Building, Room 220, and is open all year from 8:00 a.m. to 4:30 p.m., Monday through Friday. Staff members are available for undergraduate students on an individual basis during these hours. More information about Career Services may be obtained online at www.niu.edu/careerservices or by calling 815-753-1641.

Center for Access-Ability Resources

In concordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, the university provides support services for students with a variety of disabilities. A wide range of services can be obtained including, but not limited to, housing, transportation, adaptation of printed materials, testing accommodations, sign language interpreters, and advocacy with faculty and staff. Students wishing to request services or who want more information should contact the Center for Access-Ability Resources, fourth floor, Health Services Building, (815) 753-1303 (voice) or (815) 753-3000 (TTY). Verification of disability and the request for services need to be received in a timely manner so that services may be arranged and provided.

Students desiring consideration of special accommodations with respect to course work or other academic activities should see "Accommodations for Students with Disabilities."

Counseling and Student Development Center

The Counseling and Student Development Center supports the academic, vocational, emotional, social, and cultural development of students by offering assessment, counseling, outreach, consultation, training, and educational services. These services help students resolve personal difficulties and acquire the attitudes, abilities, and knowledge that will enable them to take full advantage of their college experience and be successful. The center provides an atmosphere that is welcoming and comfortable for all individuals, regardless of race, gender, ethnic background, age, sexual orientation, religion, citizenship, or disability, and embraces diversity and strives to foster and promote awareness, empathy, and cultural competence within a multicultural environment.

- Individual, group counseling, crisis intervention, and referral
- Substance abuse assessments, eating disorder assessments, and anger interventions
- Coaching for Academic Success (learning and study skills assistance)
- Workshops (in residence halls, classes, and other settings)
- Consultation (concerning mental health issues, programming, and organizations)
- Training for graduate students

Information Technology

At NIU students can access more than 1,500 computers for research, instruction, and individual use in academic departments, classrooms, and student computing labs. Many platforms are represented, including Windows, Macintosh, NetWare, OS/390, Linux, and Unix. The Information Technology Services (ITS) and ResTech helpdesks provide end-user support for many technologies. The ITS Mobility Support Team assists users with wireless devices, smartphones, and personal digital assistants (PDAs).

General access computing labs feature PIV 1.8 GHz or faster computers, CD-ROM, and/or CD burners, networked laser printers, and full-color scanners with document feeders and optical character recognition (OCR) software. All feature front/side USB, headphone, and microphone access. Most student computing labs feature Windows XP, office productivity software, Internet browsers, and various adaptive technologies for students with disabilities. In addition, statistical analysis packages such as SAS and SPSS are provided. Macintosh computers running OSX are available in labs that support the graphic arts programs. Mainframe computing is offered in an OS/390 environment. Volume purchasing of software extends savings to the university community.

NIUNet puts NIU in touch with the Abilene network: the North American proving ground for high bandwidth technologies. NIU Information Technology Services manages this 175-mile ultra-fast, fiber-optic communications network that accesses Internet2, as well as more than 50 worldwide networks. Inside, a layer-3 switched environment ensures the local network facilitates information rapidly. Wireless network connectivity is available in most public buildings and residence halls.

NIU's telephone systems include standard and advanced calling features and services such as roaming authorization codes, caller ID, voice mail, plus many more. Call tracing and caller ID blocking are offered for enhanced security.

For more information, call Information Technology Services at (815) 753-8100, or visit www.its.niu.edu.

International Student and Faculty Office

The International Student and Faculty Office provides a variety of services for international (foreign) students and faculty. For further information see the "International Programs" section of this catalog.

Latino Resource Center

The Latino Resource Center offers a variety of services to assist, encourage, and inspire Latino NIU students to engage and succeed in their pursuit of learning and to grow as campus and community leaders. Some of the services available include retention programs such as the Latina Assistance Program, Supporting Opportunities for Latinos, and Mentoring for Academic Success. The Latino Resource Center also provides cultural programming and makes referrals to appropriate offices for information and assistance with academic, social, and career opportunities. The center houses a top-of-the-line computer laboratory, library, and meeting rooms for student use.

Lesbian, Gay, Bisexual, Transgender Resource Center

The Lesbian, Gay, Bisexual, Transgender (LGBT) Resource Center provides resources and services to the university community to increase awareness and understanding related to sexual orientation and gender identity. The LGBT Resource Center supports the educational mission of Northern Illinois University by providing educational materials and programs on lesbian, gay, bisexual, and transgender life and culture. In collaboration with other groups on campus, the resource center offers speakers, films, panel discussions, theatrical performances, and much more for the entire campus. Resource center staff offer confidential information, support, and referral for students, faculty, and staff whose lives are impacted by issues related to sexual orientation and/or gender identity, including LGBT and questioning individuals themselves, as well as their family members, friends, and allies. The office includes a resource room housing a library of over 700 books on LGBT topics, a library of LGBT films, LGBT magazines, two computer stations, and a variety of free brochures and handouts.

Office of the Ombudsman

The Office of the Ombudsman offers confidential assistance to any member of the university community who is attempting to resolve a university-related concern. Any type of issue, such as academic, housing, student conduct, employment, or personal, can be brought to the attention of the office staff.

The office provides an objective environment in which to discuss the situation, identify and explain pertinent policies and procedures, develop options and strategies that may be helpful in resolving the matter, and offer accurate referral to university officials who are authorized to address or resolve the concern. As designated neutrals, staff members in the office are prohibited from advocating on behalf of any individual but may be able to suggest others who can serve as potential advocates if necessary. Due to the strictly confidential nature of communications with the Office of the Ombudsman, disclosures to the office do no constitute notice to the university.

Contact the Office of the Ombudsman regarding questions about the university, its regulations and procedures, or other services available on campus. Services are free of charge. The Office of the Ombudsman is located in the Holmes Student Center, Room 601, (815) 753-1414.

Office of Testing Services

The Office of Testing Services provides a variety of services to students and faculty. This office administers many of the tests associated with undergraduate admissions, course placement, credit by examination, departmental qualification requirements, and admission to graduate and professional schools.

Testing Services maintains files of test scores and serves as the campus location to which scores on tests taken at other institutions or test centers may be directed. Included in this group are scores on the Advanced Placement Program examinations and College Level Examination Program (CLEP) examinations.

Recreation Services

Recreation Services, located in the Student Recreation Center, provides exceptional opportunities for students to participate in a variety of recreational and sport activities.

The Student Recreation Center offers state-of-the-art exercise equipment and an abundance of court space. The 150,000 square-foot facility houses a 6,000 square-foot cardiovascular exercise room; 11 racquetball courts; eight multipurpose courts used for basketball, volleyball, tennis, and badminton; table tennis; a free weight room; a jogging track; two activity/aerobics rooms; an Outing Centre; and locker rooms with saunas.

The renovated Chick Evans Field House provides approximately 80,000 square feet of additional space for exercise, recreation programs, and academics. Two multi-purpose courts for basketball and volleyball, and two boarded courts for indoor soccer and floor hockey compose the majority of the field house space. A three-lane run/walk track, two activity rooms for group exercise classes and martial arts training, two smart classrooms for various academic courses, and locker rooms are also available. The fitness center provides more than 20 pieces of cardiovascular exercise equipment including treadmills, elliptical trainers, recumbent bikes, stretch trainers, and a 12-station multi-trainer for strength workouts.

A variety of fitness opportunities are available to those students interested in keeping fit. Students can join group exercise classes including step, yoga, spinning, and kickboxing, to name a few. Students can receive nutritional as well as weight training consultations, and have a personal trainer develop a complete fitness program to suit their needs.

Competitive individual, dual, and team sports activities are available to all students through the intramural sports program. Students can enjoy competition in basketball, volleyball, soccer, flag football, and much more.

The Student Recreation Center houses a large Outing Centre with a variety of equipment available for student checkout. Cross-country skis, camping equipment, roller blades, ice skates, and much more can be enjoyed. Backpacking, canoeing, kayaking, rock climbing, skiing, and other trips are scheduled throughout the year through the Outing Centre.

The Sport Clubs program within Recreation Services provides opportunities to develop individual skills in special activities and offers competition with similar clubs at other institutions. NIU offers an abundance of sport clubs including lacrosse, hockey, fencing, soccer, rugby, and more.

Recreation Services offers student employment opportunities in the areas of facility supervision, sport officiating, fitness instruction, outdoor trip leading, and clerical support.

Students' Legal Assistance Office

Two Illinois attorneys and their staff provide legal information and assistance to eligible fee-paying NIU students. The office handles a large variety of cases including landlord-tenant, criminal misdemeanor, traffic, consumer, discrimination, personal injury, employer-employee, public benefits, and domestic relations. It is preferred that appointments be made. The offices are located on the sixth floor of the Holmes Student Center and can be reached by calling 753-1701.

The office is funded by the NIU Student Association. The attorneys are prevented by their contracts and the Code of Professional Ethics from handling matters relating to NIU and matters between NIU students. Persons able to procure private counsel are not eligible for litigational representation.

In addition to its direct legal services, the lawyers have instituted a mediation service to handle problems between students and have developed an extensive "preventative-law" program designed to prevent problems through community education. Handout materials include a *Dispute Resolution Handbook, Landlord/Tenant Handbook, Used Car Buyer's Guide, Traffic Ticket Handbook, Preventing Sexual Assault Handbook* and various forms including an apartment condition report, subleases, and roommate agreements.

Women's Resource Center

The Women's Resource Center offers information, programs, and services to NIU's community of women, including students, faculty, and staff. The office is especially interested in serving women returning to school, students who have dependents, and nontraditional students. The staff provides workshops and group and individual consultations on career development, life transitions, personal effectiveness, academic skills, and leadership development. The office maintains an up-to-date listing of services available to students from campus and community service providers, and provides short-term counseling, referrals for more extensive services, and information resources related to women's special concerns. Located at 105 Normal Road, the office is accessible to disabled persons. For more information call (815)753-0320.

Other Campus Human Service Agencies

The **Child Development Laboratory** (Gabel Hall, Rooms 169-170, 753-1150) provides child care programs for children ages 6 weeks to 7 years. Enrollment in all programs is open to the university and DeKalb communities, with half-day and full-day enrollments during academic terms. Children are enrolled based

on available space, time of request, and their age. Assessment of each child's readiness for a group experience is made in early contacts. The facility is licensed by the Illinois Department of Children and Family Services for 47 children, and is a research and training facility for child development majors sponsored by the School of Family, Consumer, and Nutrition Sciences. For more information, contact the Child Development Laboratory.

The **Counseling Laboratory** (Graham Hall, Room 416, 753-9312) offers counseling services to persons who want assistance improving their personality development, modifying self-defeating behavioral characteristics, or resolving personal, career, or educational dilemmas. Counselors are advanced graduate students in counseling. Services are free, except that a nominal fee may be charged for some psychological or career interest testing.

The **Family Center** (Wirtz Hall, Room 146, 753-1684) provides individual, couple, family, and group therapy services to students of NIU, and to all residents of DeKalb and the greater northern Illinois area. Therapists are advanced graduate students under the direct supervision of licensed marriage and family therapist faculty, who are also Approved Supervisors through the American Association for Marriage and Family Therapy. The graduate program in marriage and family therapy is accredited by the Council on Accreditation for Marriage and Family Therapy Education. The facility and program are part of the School of Family, Consumer, and Nutrition Sciences in the College of Health and Human Sciences.

The **Psychological Services Center** (Psychology Building, Room 86, 753-0591) offers a wide variety of psychological evaluation and psychotherapy. Clients range in age from young children to older adults. Most therapy is free of charge to full-time NIU students. A sliding scale is available for clients from the local community. The center is staffed by faculty and doctoral students in clinical psychology in the Department of Psychology.

The **Speech-Language-Hearing Clinic** (Lucinda Avenue, 753-1481) offers a comprehensive program of evaluation, rehabilitation, and counseling services for any student with a hearing loss and/or speech and language disorder. Hearing aids, accessories, and repairs are available. The clinic is a program of the Department of Communicative Disorders.

Other Services

Campus Transportation

NIU maintains the largest student-run university bus system in Illinois. The 13-bus system, governed by the Student Association Mass Transit Board, provides free transportation for all fee-paying students to campus and the DeKalb community. The Huskie buses are in operation seven days a week while school is in session during the fall and spring semesters, during winter and spring break, and for limited hours during summer school. All Huskie buses are equipped with chair lifts to provide all students easy access to and from campus, shopping, and entertainment areas. For more information, call the Student Association at (815) 753-9922.

In conjunction with the University Police, the Mass Transit Board runs Late Night Ride Service, which provides free safe passage home for students. The service operates Friday and Saturday nights from 2 a.m. to 6 a.m. and can be reached at 753-2222.

Through the Mass Transit Board and the Center for Access-Ability Resources, the NIU Student Association operates the FREEDOMMOBILE which provides transportation around the campus and vicinity for students with disabilities. During winter months class-to-class transportation is available for students with a qualifying disability. For more information, call the Center for Access-Ability Resources at (815) 753-1303.

Orientation and Registration

An orientation program is provided for all new undergraduate students enrolling for the summer session and the fall semester. These one-day spring and summer programs introduce students and family members to university programs, services, and facilities and describe some of the varied aspects of college life. Academic advising, placement and proficiency testing, and registration information are included as part of the program. Orientation/testing/advising/registration programs are also conducted in November, December, and January for students who wish to enroll for the spring terms.

Parking

Parking permits are required on campus unless pay parking is utilized. Parking facilities are limited and controlled. Parking lots are color-coded; all vehicles, including motorcycles and mopeds, must display an appropriate permit. Special parking privileges are extended to handicapped persons and to individuals who are temporarily disabled. For further information, contact Campus Parking Services, located on the corner of Normal Road and Lincoln Terrace, at (815) 753-1045.

Fifteen-minute loading and unloading spaces are scattered throughout campus and require no special identification other than the use of the vehicle's emergency flashers.

Regional Programs

The university's courses at regional sites are taught by university faculty and are available to students meeting the standards and prerequisites of courses taught in DeKalb. Baccalaureate degree completion programs are scheduled at regional sites at times and places convenient for adult students who generally are able to pursue degree work on only a part-time basis.

Northern Illinois University, in partnership with regional community colleges, offers bachelor's degree completion programs in high-demand areas. Affordable classes are offered evening and weekeneds, mostly part-time, providing flexible options for hard-working adults, regardless of where they earned previous college credit. NIU currently has formal partnership agreements with Rock Valley College, Elgin Community College, and Waubonsee Community College.

Students admitted to NIU as degree-seeking students as well as visiting students and non-degree students may enroll in courses offered at regional sites. Adult students who are exploring various disciplines and testing their resolve before formal commitment to a degree program are also welcome in these courses, as are adults who wish to pursue nondegree courses for personal and professional development. Courses are taught in several community college districts, including the College of DuPage, Harper College, Elgin, Joliet, and Rock Valley College.

Rapidly developing technologies, new discoveries emerging from research, and expanding knowledge in every field make continuing education and development a necessity for professionals who wish to maintain competency on a level equal to that of their most recently graduated colleagues. The extending of university resources to public groups sometimes takes the form of providing updating and refresher courses to practicing professionals who want to stay current with the latest developments in their fields. Sometimes professionals in one field need the practical knowledge and informed theory of another field. To meet such diverse needs, the external programming staff in the university's academic colleges identifies and consults with faculty to develop and present instruction in the format most appropriate to particular groups of professionals.

The university provides professional development experiences in a variety of appropriate formats such as one-day workshops, seminars, conferences, training programs, short courses, guided individual study courses, and consultations. Enlisting the instructional and research expertise of the diverse university faculty, the external programming staff matches these resources with the articulated needs of practicing professionals in Illinois.

Many of these short courses are tailored to meet the professional needs of a particular agency or business. Others are offered more broadly, attracting participants from across professions, communities, and companies.

NIU Hoffman Estates, NIU Naperville, and NIU Rockford

The centers at Hoffman Estates, Naperville, and Rockford function both as facilities for corporate clients and as after-hours locations for NIU programs for adult learners. All these facilities provide daytime space to businesses, organizations, and associations in a professional environment ideal for training sessions, meetings, and special events. As regional sites, the Hoffman Estates, Naperville, and Rockford centers provide evening and Saturday classroom and computer laboratory space for NIU's academic programs. The credit courses typically available at the centers are offered at the graduate level and the upper-division, undergraduate level.

Offices on NIU's DeKalb campus handle all admissions, registration, advising, class scheduling, class materials and specific information regarding classes offered at all regional site locations.

The Lorado Taft Field Campus

The 140-acre Lorado Taft Field Campus is located approximately 35 miles west of DeKalb near the city of Oregon, Illinois. This branch campus, adjacent to the Lowden Memorial State Park, is nestled in a hilly and heavily wooded area on the east side of the Rock River, which was formerly the site of the Eagle's Nest Art Association. The buildings in this scenic area are equipped for year-round use. The area is ideal for practical natural laboratory work and study of various aspects of environmental education not available in the traditional classroom. The facilities of the Lorado Taft Field Campus may also be used for meetings, conferences, workshops, and retreats by other university-related groups on a space-available basis at a modest cost.

College of Business

William J. Tallon, Ph.D., interim dean
Daniel Wunsch, Ph.D., interim associate dean

Programs leading to the degree Bachelor of Science (B.S.) are offered in all departments in the College of Business and are accredited by AACSB International–The Association to Advance Collegiate Schools of Business.

The college also participates in the interdisciplinary minor in environmental management systems offered through the Social Science Research Institute.

Inquiries concerning guidelines for the College of Business should be directed to the Office of Undergraduate Studies in Business.

Department Names and Undergraduate Programs Offered

Department of Accountancy
B.S. in accountancy

Department of Finance
B.S. in finance

Department of Management
B.S. in management

Department of Marketing
B.S. in marketing

Department of Operations Management and Information Systems
B.S. in operations and information management

The college also offers a B.S. in business administration. Students interested in pursuing this major should contact the Office of Undergraduate Studies in Business, Barsema Hall 201.

College Mission Statement

The College of Business provides higher education and professional outreach in northern Illinois, participates in relevant activities at the national level, and is committed to raising students' awareness about the implications of international and global business operations. The college offers outstanding educational programs and academic services to students, faculty, business, and other stakeholders. The college endorses a balance between teaching and research while engaging in partnerships with the business community. The college focuses its efforts to continually improve the quality of instruction and scholarship to advance its disciplines and the success of all learners.

The College of Business is committed to preparing learners to succeed in the global business environment by delivering a dynamic and innovative curriculum that is technologically at the forefront; preparing a foundation for learners to engage in lifelong learning and achievement in a rapidly changing, increasingly diverse society; building partnerships both internal and external to the university to create mutual value; recruiting high quality undergraduate and graduate students and supporting their development towards achieving excellence in their careers; recruiting, supporting, and maintaining high quality faculty and staff in support of excellence in teaching, research, and operations.

Requirements for College of Business Majors

All students must complete all required 100- and 200-level courses before enrolling in 300-level business courses.

The major portion of the professional business courses must be taken during the junior and senior years, and at least 50 percent of the total hours required for the baccalaureate degree must be taken in subjects other than business and economics. Up to 9 semester hours of economics and up to 6 semester hours of statistics may be counted as part of the non-business curriculum.

The College of Business is competitive based on a student's overall GPA and performance in selected tool courses. All students must take UBUS 310 in the first semester in which they take 300-level course work in the College of Business. All 100- and 200-level College of Business core requirements with a C or better in ACCY 206, ACCY 207, MGMT 217, and UBUS 223, a cumulative GPA of at least 2.75, and junior standing are prerequisites for UBUS 310. UBUS 311 must be taken no later than the semester or term immediately following completion of UBUS 310.

No student with a major or minor in the College of Business will be permitted to take any business course on the pass/fail basis.

Students may be allowed to audit a business course with permission from the Office of Undergraduate Studies in Business; however, enrollment preference goes to students who are taking course work for credit.

Students may enroll in a business course no more than twice. A withdrawal from a 300- or 400-level business course counts as an enrollment. Students enrolling in a junior-senior level business course may not subsequently transfer that course from another college or university.

A minimum of 6 semester hours of credit in senior (400-level) courses required in the major must be earned at NIU.

To graduate with a degree in the College of Business, students must have a minimum GPA of 2.00 (C average) in their majors, computed by using all 300- and 400-level courses taken in a student's major whether elective or required. Included in the calculation of a student's major GPA are all 300- and 400-level courses taken outside the department and outside the College of Business that are required by the student's major.

Business Core (45-50)
The business core must be completed by all students majoring in business.

ACCY 206 - Introductory Financial Accounting (3)
ACCY 207 - Introductory Cost Management (3)
*ECON 260 - Principles of Microeconomics (3)
*ECON 261 - Principles of Macroeconomics (3)
*ENGL 104 - Rhetoric and Composition II (3),
  OR *ENGL 105 - Rhetoric and Composition (3), if placed into ENGL 105,
  OR Pass the English Core Competency II Examination (0)
*MATH 211 - Calculus for Business and Social Science (3),
  OR *MATH 229 - Calculus I (4)
MGMT 217 - Legal Environment of Business (3)
MGMT 468 - Strategic Management (3)
OMIS 351 - Information Systems in Organizations (3),
  OR ACCY 310A[1] - Accounting Information Systems (3)
  AND ACCY 310S[1] - Accounting Information Systems Laboratory (1)
*PSYC 102 - Introduction to Psychology (3)
UBUS 223 - Introduction to Business Statistics (3)
UBUS 310 - Business Core: Lecture (9)
UBUS 311 - Business Core: Applications Seminar (3)
One of the following (3)
  *ANTH 120 - Anthropology and Human Diversity (3)
  *GEOG 202 - World Regional Geography (3)
  *GEOG 204 - Geography of Economic Activities (3)
  *HIST 171 - The World Since 1500 (3)
  *PHIL 170 - World Religions (3)
  *PHIL 231 - Contemporary Moral Issues (3)
  *POLS 260 - Introduction to Comparative Politics (3)
  *SOCI 170 - Introduction to Sociology (3)
  *WOMS 235 - Women Across Cultures and Centuries (3)

Major in Business Administration (B.S.)

Students pursuing the B.S. degree in business administration will be prepared for a wide range of entry-level positions in a variety of organizations. The curriculum provides a broad-based education in all functional areas of business, including accounting, finance, management, marketing, and operations management and information systems. Interested students should contact the Undergraduate Studies in Business Office.

Business Core (45-50)

Other Requirements in the College of Business (27)

ACCY 306 - Financial Accounting Information for Business Decisions (3)
ACCY 307 - Managerial Accounting Information for Decisions and Control (3)
FINA 360 - Introduction to Financial Markets and Investments (3)
MGMT 335 - Organizational Behavior (3)
MGMT 346 - Business Communication (3)
MGMT 355 - Human Resource Management (3)
MKTG 325 - Buyer Behavior (3)
MKTG 350 - Principles of Selling (3)
OMIS 444 - Manufacturing Technology Management (3),
  OR OMIS 450 - Service Operations (3)

Total Hours for a Major in Business Administration: 72-77

Special Requirements

Satisfactory completion of UBUS 310 as evidenced by a grade of C or better is required before a business administration major is allowed to enroll in any 300- or 400-level business course that has UBUS 310 as a prerequisite.

To graduate as a business administration major, a student must earn a grade of at least C in each business course required in the major.

Business administration majors may repeat a maximum of two 300- or 400-level business courses.

Minor in Business Administration (36-41)

The minor in business administration is available only to NIU nonbusiness students in good academic standing. Students should declare the business administration minor as early in the semester as possible. No student in the minor in business administration will be permitted to take any business course on the pass/fail basis.

ACCY 288 - Fundamentals of Accounting (3),
  OR ACCY 206 - Introductory Financial Accounting (3), and ACCY 207 - Introductory Cost Management (3)
*ECON 260 - Principles of Microeconomics (3)
*MATH 210 - Finite Mathematics (3),
  OR *MATH 211 - Calculus for Business and Social Science (3),
  OR *MATH 229 - Calculus I (4) (whichever is taken first)
MGMT 217 - Legal Environment of Business (3)
*PSYC 102 - Introduction to Psychology (3)
UBUS 223 - Introduction to Business Statistics (3),
  OR STAT 301 - Elementary Statistics (4),
  OR STAT 350 - Introduction to Probability and Statistics (3)
Three of the following (9)
  FINA 320 - Principles of Finance (3)
  MGMT 333 - Principles of Management (3)
  MKTG 310 - Principles of Marketing (3)
  OMIS 338 - Principles of Operations Management (3)
One of the following (3)
  *ANTH 120 - Anthropology and Human Diversity (3)
  *GEOG 202 - World Regional Geography (3)
  *GEOG 204 - Geography of Economic Activities (3)
  *HIST 171 - The World Since 1500 (3)
  *PHIL 170 - World Religions (3)
  *PHIL 231 - Contemporary Moral Issues (3)
  *POLS 260 - Introduction to Comparative Politics (3)
  *SOCI 170 - Introduction to Sociology (3)
  *WOMS 235 - Women Across Cultures and Centuries (3)
Two upper-division courses in accountancy, finance, management, marketing, or operations management and information systems (6)[2]

Students should consult with an adviser in the Undergraduate Studies Office, Barsema 201, for advisement.

Transfer Credit in the College of Business

Decisions about the transfer of course credits to meet baccalaureate degree requirements in business are based upon the following guidelines.

Students transferring in from accredited community/junior colleges or from accredited four-year colleges are covered by the same curriculum policies that apply to students at NIU. Courses approved for transfer to meet general education requirements or as general free electives are determined by the Office of Admissions. Courses transferred to meet requirements for the accountancy, business administration, finance, management, marketing, or operations and information management majors are determined by the College of Business in conjunction with the Office of Admissions.

Students who plan to transfer to NIU and major in an area of business should have taken as many of the lower-division business core courses as possible.

Students are advised not to take the equivalents of any 300- or 400-level business courses restricted to juniors and seniors during the first two years whether in a junior college or a four-year school.

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* Available for general education credit
[1] Accountancy students are required to take ACCY 310A & ACCY 310S.
[2] Prerequisites for all upper-division courses must be met prior to enrollment.

Undergraduates Completing Phase One Requirements for an Advanced Degree in Business

Students who plan to pursue a graduate degree in business at NIU may satisfy most of the Phase One requirements as a result of their successful completion of an undergraduate business degree or a business minor. Contact the director of M.B.A. programs to determine what restrictions apply to Phase One course work.

Interdisciplinary Courses Offered by the College of Business

UBUS 101. BUSINESS DISCIPLINES AND ISSUES (1). Designed to provide students with an understanding of the various disciplines in business by focusing on current business issues through readings and with speakers from business and faculty. S/U grading. Not available for credit for upper-division business majors.

UBUS 223. INTRODUCTION TO BUSINESS STATISTICS (3). Collection and presentation of data, measures of central tendency and variability, probability, sampling and sampling distributions, statistical inferences, simple linear regression and correlation, with emphasis on applications of these topics to business situations. PRQ: MATH 210 or MATH 211 or MATH 229 or consent of college.

UBUS 310. BUSINESS CORE: LECTURE (9). Introduction to the three primary functional areas in business (finance, marketing, and operations) as well as general principles of business management. Emphasis on interdisciplinary application of the business principles, and the cross-functional relationships between functional areas in business. PRQ: All 100- and 200-level College of Business core requirements with a C or better in ACCY 206, ACCY 207, MGMT 217, and UBUS 223, a cumulative GPA of at least 2.75, and junior standing.

UBUS 311. BUSINESS CORE: APPLICATIONS SEMINAR (3). Application of the business principles covered in UBUS 310. Case analyses, exercises, current readings, and discussion of contemporary issues in business. Practice in team problem solving, oral and written communication skills. Must be taken concurrently with UBUS 310, or in the semester or term immediately following completion of UBUS 310. Must be taken prior to, or concurrently with, any 400-level College of Business course. CRQ: UBUS 310.

UBUS 485. BUSINESS CONSULTING PROJECT (3). Supervised student team projects conducted with selected business organizations. Emphasis on collaborative efforts among students, faculty, and business representatives in a project management setting and the delivery of cross-functional business solutions. PRQ: At least junior standing and consent of college.

UBUS 490. TOPICS IN BUSINESS (1 to 3). Selected topics from the various business disciplines. Course content includes an integration of the functional areas of business administration and topics of current importance. May be repeated to a maximum of 6 semester hours. CRQ: UBUS 311; or FINA 320, MGMT 333, MKTG 310, and OMIS 338. PRQ: Consent of college.

UBUS 499H. INTRODUCTION TO BUSINESS RESEARCH (3). Study of contemporary business research to prepare students for honors projects in business and graduate research assignments, including research design, selected methodologies, and appropriate structure for academic research papers. PRQ: UBUS 310 and admission to department honors in the College of Business, or admission to the University Honors program, or consent of instructor.

Department of Accountancy (ACCY)

The Department of Accountancy offers a B.S. degree which prepares its graduates for positions in industry, public accounting, government, and not-for-profit organizations, and for graduate study. The program provides students with a foundation in all primary areas of the accounting discipline. Students are also provided with an opportunity to develop their communication, technology, and team-building skills; apply their knowledge to structured problems; use critical thinking skills to analyze ambiguous situations and provide relevant business alternatives; and develop an understanding of ethical issues and expectations for professional conduct in business. Graduates are expected to be sufficiently competent in the areas of cost management, financial accounting, accounting information systems, assurance services, federal income taxes, and related business areas to have the necessary foundation for a career and/or for graduate study.

Department Requirements

Retention in the accountancy program is competitive based on a student's overall GPA for 60 semester hours and grades earned in ACCY 206 and ACCY 207 or equivalent courses. Transcript review must be formally requested by a qualified student by submitting a completed request form. This review must be complete before permission is granted for a student to enroll in any 300- or 400-level ACCY courses. This form can be obtained from the Undergraduate Studies in Business Office or from the Department of Accountancy.

Satisfactory completion of UBUS 310 as evidenced by a grade of C or better is required before an accountancy major is allowed to enroll in any 400-level accountancy course.

Accountancy prerequisites are deemed to be met only by obtaining a grade of C or better. (It is necessary to repeat an ACCY prerequisite in which a grade below C was earned before taking the next course in the sequence.)

Accountancy majors may repeat a maximum of two upper-level ACCY courses. Students who want to repeat any ACCY courses will be allowed to enroll in that course only during add/drop if sufficient resources are available.

Upper-level (300-400) ACCY courses will not be accepted from other institutions except with permission of the Department of Accountancy.

To graduate as an accountancy major, a transfer student will be required to take at least 12 semester hours of 300-400 level ACCY courses at NIU.

Of the total semester hours required for the degree, 90 semester hours must be in courses outside of the accounting discipline.

To graduate as an accountancy major, a student must have at least a C in each required ACCY course.

Applied/Diversified Study

To graduate with a B.S. in accountancy, students are required to complete 12 semester hours of applied or diversified study. This requirement does not preclude an accountancy student from pursuing a formal minor offered by a department outside the College of Business, which can be used to fulfill this requirement.

Applied Study

Applied study requires 12 semester hours taken in a single department outside the College of Business. Suggested study includes courses offered by departments in the Colleges of Engineering and Engineering Technology, Liberal Arts and Sciences, and Visual and Performing Arts.

Diversified Study

As an alternative to the applied study of course work taken in a single department, a student may elect diversified study, under which the 12 semester hours are selected in consultation with the department adviser. These courses should be selected so that the student gains opportunities to develop intellectual and analytical skills and/or interpersonal, leadership, and communication skills.
Degree with Honors

Major in Accountancy (B.S.)

Business Core (45-50)

Requirements in Department (38)

ACCY 320 - Intermediate Cost Management (3)
ACCY 331 - Financial Reporting I (4)
ACCY 360 - Assurance Services (3)
ACCY 370 - Accounting Career Planning Seminar (1)
ACCY 432 - Financial Reporting II (3)
ACCY 450 - Taxation of Business Entities and Individuals (3)
One of the following (3)
- ACCY 411 - Advanced Accounting Information Systems (3)
- ACCY 421 - Advanced Cost Management (3)
- ACCY 433 - Financial Reporting III (3)
- ACCY 439 - Contemporary Issues in Financial Accounting (3)
- ACCY 462 - Internal Auditing (3)
- ACCY 465 - Forensic Accounting/Fraud Examination (3)
- ACCY 480 - Governmental and Not-For-Profit Accounting (3)

One of the following (3)
- ACCY 411[1] - Advanced Accounting Information Systems (3)
- ACCY 421[1] - Advanced Cost Management (3)
- ACCY 433[1] - Financial Reporting III (3)
- ACCY 439[1] - Contemporary Issues in Financial Accounting (3)
- ACCY 462[1] - Internal Auditing (3)
- ACCY 465[1] - Forensic Accounting/Fraud Examination (3)
- ACCY 473 - Internship in Accountancy (3)
- ACCY 480[1] - Governmental and Not-For-Profit Accounting (3)
- ACCY 499H - Honors Directed Research in Accountancy (3)

One 300- or 400-level non-accountancy College of Business course excluding OMIS 351 (3)
Applied or diversified study (12)

Requirement outside Department (3)

MGMT 346 - Business Communication (3)

Total Hours for a Major in Accountancy: 86-91

Degree with Honors

The Accountancy Honors Program offers students the opportunity for challenging educational experiences. The departmental honors program promotes a deeper understanding of topics within the accountancy profession and emphasizes unique opportunities for students' professional and business development. The Accountancy Honors Program supports the general mission of the

[1] If not used to fulfill requirement above.

University Honors Program. Students are encouraged to apply to both programs; however, the departmental honors program does not require admission to the University Honors Program.

Admission

Interested students are encouraged to apply for admission to the Department of Accountancy's Honors Program. Admission requirements are

a minimum overall GPA of 3.20;

an A in both ACCY 206 and ACCY 207 or equivalent courses or a minimum GPA of 3.50 in all upper-level ACCY courses (minimum of two upper-level courses completed); and

a completed application for department honors.

Retention

Retention in the Accountancy Honors Program requires a minimum NIU 3.20 cumulative GPA and a minimum 3.50 GPA in upper-level department course work. Students whose GPA falls below the minimum requirements for an academic term must achieve the retention standards before additional honors courses can be taken.

Graduation

Graduation with departmental honors in accountancy requires

a minimum NIU 3.20 cumulative GPA;

a minimum 3.50 GPA in upper-level departmental course work;

completion of at least 6 semester hours of upper-level accountancy honors courses (excluding ACCY 499H);

completion of UBUS 499H, Introduction to Business Research, with a minimum grade of B; and

completion of ACCY 499H, Honors Directed Research in Accountancy, as an Accountancy Senior Honors Project. The project topic must be approved by the student's Accountancy Honors Program project adviser and Department of Accountancy chair. For students attempting University Honors or Upper-Division University Honors, the Accountancy Honors Senior Project may be completed concurrently with the Upper-Division University Honors Capstone project.

Students in the Accountancy Honors Program graduate with the designation *Graduated with Departmental Honors in Accountancy* on their official NIU transcript report.

Internships in Accountancy

The internship (ACCY 473) consists of work experience in an accounting function for ten to thirteen weeks and completion of written and oral reports. Applications are reviewed by the internship coordinator and approved on the basis of professional promise, instructor recommendation, and credit in specified courses. The Department of Accountancy coordinates all academic internships. Students submit resumes and participate in interviews approximately six to twelve months prior to the internship. Spring semester interns have the opportunity to enroll in additional accountancy courses from April to May. More detailed information is available in the departmental office.

Professional Examination Preparation

The accountancy program provides students with the skills necessary to pass the major certification examinations in the accountancy profession, including the Certified Public Accountant (C.P.A.) Examination, the Certified Internal Auditor (C.I.A.) Examination, and the Certified Management Accountant (C.M.A.) Examination. Information about requirements and review courses for all these examinations is available in the department office.

C.P.A. Examination candidates in Illinois are required to complete 150 semester hours of course work and must have earned a baccalaureate degree or higher degree before sitting for the examination. The B.S. program, when combined with the M.A.S. degree, provides students with an excellent background for the C.P.A. Examination.

The Institute of Internal Auditors (IIA) has approved NIU as a participant in IIA's Endorsed Internal Auditing Program. To receive an IIA certificate of completion, a student must have either a B.S. in accountancy from NIU or an M.A.S. degree from NIU. As part of the certificate requirements students must complete ACCY 462, an approved business elective, and an academic internship (ACCY 473) in an internal audit position. A student completing the internal audit course work will have "Completion of internal audit course work as endorsed by the Institute of Internal Auditors" on the official NIU transcript.

Course List

206. INTRODUCTORY FINANCIAL ACCOUNTING (3). Presentation of accounting as an information discipline. Nature of accounting, basic accounting concepts, financial statements, accrual and cash bases, the accounting cycle, data accumulation with manual and electronic data processing systems, monetary assets, current liabilities, inventories, fixed assets, long-term liabilities, and owner's equity. Not open to students with credit in ACCY 288. PRQ: Cumulative GPA of at least 2.00 and completion of 24 or more semester hours of course work.

207. INTRODUCTORY COST MANAGEMENT (3). Introduction to the study of the information required in management planning and control systems. Theory and application of product costing, operational control, cost allocation, and performance evaluation for manufacturing and service organizations. Topics include standard costing, budgeting, job order costing, and process costing. PRQ: ACCY 206 or equivalent and a minimum cumulative GPA of 2.00.

288. FUNDAMENTALS OF ACCOUNTING (3). Designed for students who do not expect to become professional accountants, but who need to understand basic accounting concepts and to gain insight into the structure and the operating characteristics of accounting systems. Emphasis on accounting principles, structuring accounting to serve a variety of purposes, and the meaning and limitations of financial statements. Not open to College of Business majors or to students with credit in ACCY 206 and/or ACCY 207.

306. FINANCIAL ACCOUNTING INFORMATION FOR BUSINESS DECISIONS (3). Financial accounting and reporting from the point of view of the user of financial accounting information. Emphasis on the use of financial accounting information in decision making. Not open to accountancy majors. CRQ: UBUS 310.

307. MANAGERIAL ACCOUNTING INFORMATION FOR DECISIONS AND CONTROL (3). Evaluation and analysis of managerial accounting concepts relevant for management planning and control. In-depth analysis of the use of accounting information such as budgets, standard costs, cost-volume-profit data, relevant costs, and product costs in decision making. Not open to accountancy majors. CRQ: UBUS 310.

309. A SURVEY OF INCOME TAXES (3). Introduction to federal income tax provisions, providing an overview of federal income tax developments. Emphasis on taxation of business and individual taxpayers including implications for decision making. Not open to accountancy majors. PRQ: ACCY 207 or ACCY 288.

310A. ACCOUNTING INFORMATION SYSTEMS (3). Examination of organizational accounting information systems that capture information from the major business processes and transaction cycles. Emphasis on how these information systems serve as the basis for the functional areas of accounting and business. Internal controls, information technologies including databases, and reporting methodologies are stressed through applied projects and case studies.

Must be taken concurrently with ACCY 310S. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of department. CRQ: UBUS 310.

310S. ACCOUNTING INFORMATION SYSTEMS LABORATORY (1). Basic instruction in skills and techniques necessary to identify, collect, analyze and report accounting information. Must be taken concurrently with ACCY 310A. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of the department. CRQ: UBUS 310.

319. FUNDAMENTALS OF ACCOUNTING INFORMATION SYSTEMS (1). Intended for students who wish to study internal auditing but are not accountancy majors. An introduction to the accounting systems in organizations that capture information from the major business processes and transaction cycles. Coverage of accounting transaction processing, internal controls, and applications of accounting systems concepts through projects and cases. Not open to accountancy majors or those with credit in ACCY 310A. PRQ: UBUS 310 and OMIS 351, or consent of department.

320. INTERMEDIATE COST MANAGEMENT (3). Continuation of the study of the information required in management planning and control systems. Theory and application of product costing, operational control, cost allocation, and performance evaluation for manufacturing, merchandising, and service organizations. Topics include budgeting, cost management for factory automation and just-in-time environments, activity-based costing, ethics, cost of quality, target costing, and life-cycle costing. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of department. CRQ: UBUS 310 and ACCY 310A.

331. FINANCIAL REPORTING I (4). Study of accounting theory and practice relating to statement of cash flows, financial statement analysis, foreign currency translation, conceptual framework, revenue recognition, conversion from cash to accrual basis, time value of money, monetary assets, inventories, plant assets, research and development costs, current liabilities, and long-term debt. Use of data bases in researching accounting issues and in analyzing and preparing financial statement disclosures. PRQ: ACCY 310A with a grade of C or better. CRQ: UBUS 310.

360. ASSURANCE SERVICES (3). Introduction and investigation of various types of assurance services including auditing, attestation, operational, and compliance services. Practices and procedures of assurance services including planning, assessing risk, testing controls, and obtaining and documenting evidence. Focus on identification and review of business processes and decisions (both financial and nonfinancial), and skills needed to analyze evidence, develop recommendations, and communicate findings. PRQ: ACCY 310A with a grade of C or better and ACCY 320 with a grade of C or better, or consent of department. CRQ: UBUS 310.

370. ACCOUNTING CAREER PLANNING SEMINAR (1). Explores the various career paths available to accountants. Assists in identifying and developing career goals, job search strategies and skills, and interpersonal skills. Activities include self-assessment and career goal planning, resume writing, mock interviews, role-playing, and information interviews. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of department.

411. ADVANCED ACCOUNTING INFORMATION SYSTEMS (3). In-depth study of advanced accounting information systems and applications. Emphasis on applied topics such as database systems, general ledger systems, e-commerce, and internal control issues. Students may not receive credit for both ACCY 411 and ACCY 611. PRQ: ACCY 310A and ACCY 310S both with a grade of C or better and MGMT 346, or consent of department. CRQ: ACCY 360 or consent of department.

421. ADVANCED COST MANAGEMENT (3). Advanced study of the information required in management planning and control systems. Theory and application of product costing, operational control, cost allocation, and performance evaluation for manufacturing and service organizations. Topics include transfer pricing, competitive costing, division performance measurement, regression analysis, statistical quality control, activity-based costing, automation and cost management, target costing, and Japanese cost management. PRQ: ACCY 320 with a grade of C or better and MGMT 346. CRQ: UBUS 311.

432. FINANCIAL REPORTING II (3). Study of financial accounting theory and practice relating to accounting for income taxes, pension and other benefit plans, leases, earnings per share, accounting changes, stockholders' equity, and investments including equity method; and an introduction to consolidated financial statements. Use of data bases in researching accounting issues and in analyzing and preparing financial statement disclosures. PRQ: ACCY 331 with a grade of C or better.

433. FINANCIAL REPORTING III (3). Study of financial accounting theory and practice relating to accounting for business combinations under the purchase and pooling methods, consolidated financial statements, international operations, segment and interim reporting standards, debt restructure, corporate insolvency, partnership accounting, and accounting for specialized industries such as banking, construction, franchising, and real estate. Coverage of SEC reporting standards. Use of data bases in researching accounting issues and in analyzing and preparing disclosures. Extensive use of group projects. PRQ: ACCY 432 with a grade of C or better and MGMT 346.

439. CONTEMPORARY ISSUES IN FINANCIAL ACCOUNTING (3). Analysis of present generally accepted accounting principles. Investigation of the historical, economic, and political influences upon accounting principles and the application of these principles in accounting practice. PRQ: 15 semester hours of accounting and at least a B average in accounting above the elementary courses and MGMT 346, or consent of department.

450. TAXATION OF BUSINESS ENTITIES AND INDIVIDUALS (3). Study of basic concepts of federal income taxation related to income, deductions, and property transactions for a broad range of taxpayers applied to the taxation of individuals and business entities, including corporations, partnerships, S corporations, and limited liability companies. PRQ: ACCY 331 with a grade of C or better.

455. INDIVIDUAL TAXATION (3). Study of the basic concepts of federal income taxation as they apply to individuals. Topics include gross income, exclusions, deductions, the taxation of sole proprietors, and computation of gains and losses on the disposition of property. Not available for credit to students with credit in ACCY 309. PRQ: ACCY 331 with a grade of C or better and junior or senior standing.

456. ADVANCED FEDERAL TAXES (3). Study of federal taxes imposed on business entities with emphasis on corporations, partnerships, and S corporations including an overview of tax research techniques. Students may not receive credit for both ACCY 456 and ACCY 644. PRQ: ACCY 455 with a grade of C or better or consent of department.

462. INTERNAL AUDITING (3). Topics include internal audit standards, internal controls, risk assessment, evidence and documentation, and communications. Auditing techniques including sampling and use of systems-based audit techniques. Review of ethics, emerging issues, and industry specific matters. PRQ: ACCY 360 with a grade of C or better and MGMT 346, or consent of department.

465. FORENSIC ACCOUNTING/FRAUD EXAMINATION (3). This course focuses on fraud detection and control from the perspective of public, internal, and private accountants. This course covers areas such as principles and standards for fraud-specific examination; fraud-specific internal control systems; and proactive and reactive investigative techniques. PRQ: ACCY 331 with a grade of C or better, ACCY 360 with a grade of C or better, and MGMT 346, or consent of department.

472. INDEPENDENT STUDY IN ACCOUNTANCY (1 to 3). Individually arranged study in accounting. May be repeated once. May not be used as an accountancy elective. PRQ: Senior standing with B average in accounting and consent of department.

473. INTERNSHIP IN ACCOUNTANCY (3 to 6). Full-time work during the fall or spring semester, or during the summer, in the accountancy/financial function of a sponsoring organization. Students submit periodic reports to the Department of Accountancy internship coordinator. May be repeated to a maximum of 6 semester hours. PRQ: ACCY 310A and ACCY 310S, ACCY 320, ACCY 331, ACCY

360, ACCY 370 and MGMT 346, junior standing, and consent of department.

475. C.P.A. PROBLEMS I (3). Analysis and review of accounting principles and practices as developed and illustrated in complex selected problems. Discussion of selected problems and theory. Laboratory practice in the solution of typical problems encountered in the C.P.A. examination. PRQ: Senior standing or consent of department.

476. C.P.A. PROBLEMS II (3). Continuation of ACCY 475. Further analysis and review of accounting principles and practices, and the continuation of laboratory practice. CRQ: ACCY 475 or consent of department.

480. GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING (3). Basic introduction to state and local government accounting, federal government accounting, not-for-profit organization accounting; GAO audit standards and the single audit act, and not-for-profit tax issues. PRQ: ACCY 331 with a grade of C or better and MGMT 346.

490. CURRENT TOPICS IN ACCOUNTANCY (1 to 3). Study of new developments in accountancy including current topics and issues. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

499H. HONORS DIRECTED RESEARCH IN ACCOUNTANCY (3). Open only to students participating in the University Honors Program or in the Department of Accountancy Honors Program. Individually arranged research in an accountancy topic of the student's selection which must be approved by the student's Honors adviser and by the department chair. PRQ: MGMT 346 and consent of department.

Accountancy Faculty

James C. Young, C.P.A., Ph.D., Michigan State University, associate professor, chair, Crowe Chizek Professor of Accountancy

Natalie T. Churyk, C.P.A., Ph.D., University of South Carolina, assistant professor

B. Douglas Clinton, C.P.A., Ph.D., University of Texas at Arlington, associate professor

C. William Cummings, C.D.P., C.P.A., Ph.D., University of Missouri, associate professor

Chih-Chen Lee, C.P.A., Ph.D., Southern Illinois University at Carbondale, assistant professor

Katrina L. Mantzke, C.P.A., Ph.D., University of Wisconsin, assistant professor

Rebecca T. Shortridge, C.P.A., Ph.D., Michigan State University, assistant professor

David H. Sinason, C.F.E., C.F.S.A., C.P.A., Ph.D., Florida State University, associate professor, Deloitte Professor of Accountancy

Pamela A. Smith, C.P.A., Ph.D., University of North Texas, associate professor, KPMG Professor of Accountancy

Donald Tidrick, C.I.A., C.M.A., C.P.A., Ph.D., Ohio State University, associate professor, Deloitte Professor of Accountancy

Sally Ann Webber, C.P.A., Ph.D., University of Texas at Arlington, associate professor, HSBC Professor of Accountancy

Department of Finance (FINA)

The Department of Finance prepares its graduates for professional positions in financial management, financial institutions, investments, and capital markets. The B.S. in finance provides students with the opportunity to master the functional areas of finance, including financial management of business enterprises, financial institutions, investment securities, financial assets, and insurable risks. Graduates learn and apply basic analytical and statistical tools used in finance, including accounting skills. Graduates acquire oral and written communication skills through frequent in-class presentations, writing assignments, student organization activities, and internships.

For the first three years of undergraduate study, all finance majors fulfill the same general education and core finance course requirements. In the senior year, as finance majors select a career path, elective courses in investments, banking, and/or the corporate finance area may be taken. Depending upon career path selection, upper-level course work also prepares students to sit for the Level I Chartered Financial Analyst (C.F.A.) examination, the Certified Treasury Professional (C.T.P.) examination, or the Certified Bank Auditor (C.B.A.) examination. All three of these professional certification programs have set global standards for excellence in the world of finance.

Department Requirements

Retention in the finance major is competitive based on a student's GPA. Transcript review must be formally requested by a qualified student by submitting a completed request form. This review must be complete before permission is granted for a student to enroll in any 300- or 400-level FINA courses. This form can be obtained from the Department of Finance.

Satisfactory completion of the finance core (FINA 330, FINA 340, and FINA 350) and ACCY 306 as evidenced by a grade of C or better in each of these courses is required prior to enrolling in any 400-level FINA course. To be retained as a finance major or minor, a student may not repeat more than two 300- or 400-level FINA courses, with a maximum of one repeat from the finance core courses (FINA 330, FINA 340, and FINA 350).

To graduate as a finance major or minor, a student must earn a grade of at least a C in each required FINA course.

Major in Finance (B.S.)

Business Core (45-50)

Requirements in Department (18)

FINA 330 - Corporate Finance (3)
FINA 340 - Investments (3)
FINA 350 - Financial Markets and Institutions (3)
Course work from the following (9)
- FINA 430 - Treasury and Credit Management (3)
- FINA 440 - Security Analysis and Portfolio Management (3)
- FINA 445 - Security Analysis Practicum (1)
- FINA 446 - Portfolio Management Practicum (1)
- FINA 450 - Commercial Bank Management (3)
- FINA 455 - Analysis of Derivative Securities (3)
- FINA 460 - Analysis of Fixed Income Securities (3)
- FINA 465 - Internal Review for Financial Institutions (3)
- FINA 470 - International Finance (3)
- FINA 475 - Financial Data Analysis (3)
- FINA 485 - Financial Process and Policy (3)
- FINA 490 - Finance Research Seminar (3)

Requirements outside Department (6)

- ACCY 306 - Financial Accounting Information for Business Decisions (3)
- ACCY 307 - Managerial Accounting Information for Decisions and Control (3)

Total Hours for a Major in Finance: 69-74

Recommendations

The finance core should be completed by the end of the junior year.

It is strongly recommended that FINA 395 be taken during the second semester of the junior year.

The course subjects listed below are recommended as suitable for many finance majors. The most suitable choices are dependent on each student's particular background, aptitudes, and career goals. Additional recommendations are available on request from the finance area departmental adviser.

- *Written and oral business communication:* Departments of Communication, English, and Management
- *Computer applications and systems analysis:* Departments of Computer Science and Operations Management and Information Systems
- *Interpersonal skills* (i.e., human resources, industrial psychology): Departments of Management, Psychology, and Sociology
- *Financial information:* Department of Accountancy
- *Mathematical and business quantitative methods:* Departments of Mathematical Sciences and Operations Management and Information Systems

Minor in Finance (24-34)

Admission to the minor in finance is competitive. This minor is suggested for students with an interest in finance who have good analytical skills.

Students wishing to apply for the minor in finance must fill out an application (available in the Department of Finance).

Pre-admission Requirements (6-7)

Students must have a minimum cumulative GPA of 3.00, consent of the Department of Finance, and a grade of C or better in the following courses.

ACCY 206 - Introductory Financial Accounting (3),
OR ACCY 288 - Fundamentals of Accounting (3)
UBUS 223 - Introduction to Business Statistics (3),
OR STAT 301 - Elementary Statistics (4),
OR STAT 350 - Introduction to Probability and Statistics (3)

Requirements (18-27)

ACCY 306 - Financial Accounting Information for Business Decisions (3)
FINA 320 - Principles of Finance (3),
OR UBUS 310 - Business Core: Lecture (9), and UBUS 311 - Business Core: Applications Seminar (3)
FINA 330 - Corporate Finance (3)
FINA 340 - Investments (3)
FINA 350 - Financial Markets and Institutions (3)
One of the following (3)
- FINA 430 - Treasury and Credit Management (3)
- FINA 440 - Security Analysis and Portfolio Management (3)

FINA 450 - Commercial Bank Management (3)
FINA 455 - Analysis of Derivative Securities (3)
FINA 460 - Analysis of Fixed Income Securities (3)
FINA 465 - Internal Review for Financial Institutions (3)
FINA 470 - International Finance (3)
FINA 475 - Financial Data Analysis (3)
FINA 485 - Financial Process and Policy (3)

Internships in Finance

Department of Finance internships take place throughout the year, though summer positions tend to be full time and fall and spring positions tend to be part time. Most interns receive monetary compensation from the employer. These internships are designed for finance majors with junior standing. Satisfactory completion of the finance core, FINA 395, and consent of the department internship coordinator are required for admission to an internship. Those students selected for an internship work in a commercial bank, other financial institution or business firm, or government agency during the summer session or a semester before their senior year. Application is made to the internship coordinator. Students are limited to a maximum of 6 semester hours of internship credit within the College of Business. Course credit, which is S/U, cannot be used to meet departmental elective credit.

Scholarships in Finance

During the fall of each year, the Department of Finance awards monetary scholarships to students majoring in finance who have exhibited outstanding academic performance and the potential for success in finance-oriented careers in business. These scholarships are typically funded by sponsoring organizations such as corporate manufacturers, commercial banks, insurance companies, real estate firms, and other businesses. In evaluating candidates for these scholarships, primary emphasis is given to their overall level of academic achievement as indicated by their GPA, together with their performance in specific finance and finance-related course work.

Chartered Financial Analyst Preparation

The Chartered Financial Analyst (C.F.A.) professional designation is awarded to investment advisers, portfolio managers, and securities research analysts who have a baccalaureate degree and who have successfully completed three examinations in financial and investment analysis. No experience is required to take the examinations, although three years of work experience in investments are necessary to be awarded the C.F.A. charter. Examinations are offered on the first Saturday in June and applications are due on the preceding August 31. It is recommended that finance majors take FINA 440, FINA 445, FINA 446, FINA 455, and FINA 460 in preparation for the C.F.A. examinations. Additional information about the C.F.A. Candidate Program is available from the Department of Finance and from the C.F.A. Institute at www.CFAinstitute.org or 800-247-8132.

Certified Treasury Professional Associate Preparation

The Certified Treasury Professional (C.T.P.) credential, formerly the Certified Cash Manager, is widely regarded by treasury managers as one of the leading credentials in the field. NIU was selected by the Association for Financial Professionals (AFP) as one of the original 10 universities in the nation to participate in the C.T.M. program. NIU students who complete FINA 430 with a grade of B or above may sit for the C.T.P. certification examination. Successful candidates will earn the Certified Treasury Professional Associate (C.T.P.A.) designation. Full C.T.P. certification will be awarded once a student has fulfilled the required two years of full-time treasury work experience. Those students earning the C.T.P.A. designation will have up to five years after the examination date to complete the requirement. Additional information about C.T.P. certification is available from the Department of Finance and from the Association for Financial Professionals at www.afponline.org or 301-907-2862.

Course List

115. PERSONAL INVESTING (3). Overview of fundamental concepts of personal investing. Topics include types of investment securities, debt management, retirement and estate planning, insurance planning, overview of the Social Security system, societal implications of investment, and related topics.

126. INSURANCE PRINCIPLES (3). Survey of financial programs providing income to offset the perils of retirement, disability, disease, premature death, and unemployment. Life and health insurance as a major social institution, with private and governmental sectors. Emphasis on diverse viewpoints of insurance providers, regulators, and consumers.

128. REAL ESTATE PRINCIPLES (3). Real estate ownership and interests, contracts, title transfer, deeds, mortgage instruments, and leases. Brokerage, real estate development, property management, and appraising.

320. PRINCIPLES OF FINANCE (3). Principles underlying managerial decisions influenced by capital structure and type of ownership; problems related to sources of financing; the tools of financial analysis and financial management; integration of economic theory and accounting. Not open to College of Business majors. PRQ: Junior standing and ACCY 206 or ACCY 288, and UBUS 223 or STAT 208 or STAT 301 or STAT 350.

330. CORPORATE FINANCE (3). Analysis of financial decisions involving investment in capital assets and the selection of internal and external sources of long-term funds. Cases and problems used to illustrate the decision-making process. Topics include capital budgeting techniques, risk analysis, debt and equity financing, dividend policies, mergers and acquisitions. PRQ: FINA 320 or UBUS 310 with a grade of at least C. CRQ: ACCY 306.

340. INVESTMENTS (3). Emphasis on risks, returns, and the investment process; alternative investment instruments; investment environments; introduction to analysis and valuation techniques; and introduction to portfolio management. PRQ: FINA 320 or UBUS 310 with a grade of at least C. CRQ: ACCY 306.

350. FINANCIAL MARKETS AND INSTITUTIONS (3). Study of the types and functions of financial institutions and the operation of financial markets. Organization and operation of deposit accepting and other financial intermediaries. Role of government regulatory agencies such as the Federal Reserve, the FDIC, and others. PRQ: FINA 320 or UBUS 310 with a grade of at least C. CRQ: ACCY 306.

360. INTRODUCTION TO FINANCIAL MARKETS AND INVESTMENTS (3). Emphasis on the behavior and determinants of interest rates, valuation and hedging concepts of fixed-income securities, common instruments of money and capital markets, equity valuation and portfolio theory, and an introduction to the valuation of derivative securities. Not open to finance majors or minors. PRQ: UBUS 311.

395. CAREER PLANNING IN FINANCE (1). Efficient job search techniques to help identify appropriate career opportunities. Preparation of resume, cover letters, business etiquette, business ethics, and mock interviews. S/U grading. PRQ: UBUS 310 with a grade of at least C and admission into the major.

430. TREASURY AND CREDIT MANAGEMENT (3). Application of major issues in working capital and short-term financing management. Integration of financial concepts and financial models through electronic spreadsheets and other relevant technology to provide expertise in the area of short-term financial management while enhancing the student's analytical skills. Topics include cash budgeting, pro forma

statements, and other techniques of analyzing current assets and liabilities. PRQ: Satisfactory completion of the finance core (FINA 330, FINA 340 and FINA 350) and ACCY 306.

440. SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT (3). Analysis of quantitative and qualitative factors leading to valuation of equity and fixed-income securities. Application of alternative valuation techniques and theories. Fundamental and technical approaches as well as contemporary developments. PRQ: Satisfactory completion of the finance core [1] and ACCY 306.

445. SECURITY ANALYSIS PRACTICUM (1). Practical experience in investment management combined with traditional academic objectives as a member of a portfolio management team responsible for the investment management of endowed funds. Student acts as industry and security analyst, making investment recommendations to the portfolio management team. May be repeated to a maximum of 2 semester hours. PRQ: Satisfactory completion of the finance core[1] ACCY 306, and consent of department.

446. PORTFOLIO MANAGEMENT PRACTICUM (1). Practical experience in investment management combined with traditional academic objectives as a member of a portfolio management team that is responsible for the investment management of endowed funds. Student acts as portfolio manager, using input from security analysts to make investment decisions as part of the portfolio management team. May be repeated to a maximum of 2 semester hours. PRQ: FINA 440 and FINA 445 with a grade of at least C, and consent of department.

450. COMMERCIAL BANK MANAGEMENT (3). An extension of FINA 350. Emphasis on the problems of formulating appropriate lending and investment policies. Relationships of the composition and movement of bank deposits to investment and loan policies stressed. Commercial banking problems covered primarily from the standpoint of the management of an individual commercial bank. PRQ: Satisfactory completion of the finance core [1] and ACCY 306.

455. ANALYSIS OF DERIVATIVE SECURITIES (3). Risk allocation function of options and futures markets studied from the perspective of market users. Hedging strategies and equilibrium pricing models. Roles of government regulation and international developments. PRQ: Satisfactory completion of the finance core[1] and ACCY 306, or FINA 360 with a grade of at least C.

458. INTERNSHIP IN FINANCE (3). Full-time work for a summer or a semester as an intern in a commercial bank, other financial institution or business firm, or government agency under the supervision of a coordinator from the Department of Finance. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Satisfactory completion of the finance core,[1] ACCY 306, FINA 395, and consent of department.

460. ANALYSIS OF FIXED INCOME SECURITIES (3). Exploration of the fixed income securities markets, institutions, and instruments. Analysis of risks and risk management of fixed income securities. Portfolio management of fixed income securities. PRQ: Satisfactory completion of the finance core[1] and ACCY 306.

465. INTERNAL REVIEW FOR FINANCIAL INSTITUTIONS (3). Introduction to the methodology of internal auditing for financial institutions. Topics include monitoring and verification of financial, operational, and control procedures. PRQ: Satisfactory completion of the finance core[1] and ACCY 306.

470. INTERNATIONAL FINANCE (3). An analytical approach with emphasis on foreign financial and marketing problems. Balance of payments position of the United States and the interrelationships among developing countries. Procedures of overseas business development and distribution. PRQ: Satisfactory completion of the finance core[1] and ACCY 306.

475. FINANCIAL DATA ANALYSIS (3). Uses and limitations of financial data bases including CRSP, COMPUSTAT, DISCLOSURE, MorningStar, and various resources available through INTERNET and the World Wide Web. Application of contemporary statistical methodology in analyzing this data for decision making purposes. PRQ: Satisfactory completion of the finance core[1] and ACCY 306.

485. FINANCIAL PROCESS AND POLICY (3). Integration and application of financial process in business decision making through case analysis and study of articles written or sponsored by senior financial managers. The role of financial process and policy in creating stakeholder value. PRQ: Satisfactory completion of the finance core[1] and ACCY 306.

490. FINANCE RESEARCH SEMINAR (3). Analysis and discussion of financial topics and empirical research found in scholarly literature. PRQ: Satisfactory completion of the finance core[1] ACCY 306, and consent of department.

495. INDEPENDENT STUDY IN FINANCE (1 to 3). Studies conducted through readings or projects in specialized topics of finance. PRQ: Satisfactory completion of the finance core,[1] ACCY 306, minimum cumulative NIU GPA of 3.10, and consent of department.

Finance Faculty

Richard J. Dowen, C.F.A., Ph.D., State University of New York, Binghamton, professor, chair
John C. Banko, Ph.D., University of Florida, assistant professor
Diane S. Docking, C.P.A., Ph.D., University of Kansas, associate professor
Gerald R. Jensen, Ph.D., University of Nebraska, Lincoln, professor
James M. Johnson, Ph.D., Ohio State University, professor
Robert E. Miller, Ph.D., University of Kansas, professor
Lee Zhou, Ph.D., University of Florida, assistant professor

[1] The finance core consists of FINA 330, FINA 340, and FINA 350.

Department of Management (MGMT)

Students pursuing the B.S. degree in management select one of two emphases: organizational management or human resource management. Students in the organizational management emphasis are prepared for management trainee, first-level supervisory, or other entry-level management positions in a variety of commercial enterprises. This emphasis also prepares students for entrepreneurship. Students in the human resource management emphasis are prepared for entry-level positions as human resource generalists or specialists in a variety of firms.

Department Requirements

Retention in the management major is competitive based on a student's GPA. A transcript review must be completed by the department and permission granted before a management major can enroll in MGMT 335 or MGMT 355.

Satisfactory completion of UBUS 310 as evidenced by a grade of C or better is required before a management major is allowed to enroll in any 300- or 400-level course required in the major that has UBUS 310 as a prerequisite.

Management prerequisites are met only by obtaining a grade of C or better. (It is necessary to repeat a MGMT prerequisite in which a grade below C was earned before taking the next course in the sequence.)

To graduate as a management major, a student must earn a grade of at least C in each course required in the major, which includes courses in the business core, required MGMT courses, and all electives required for the major.

Management majors may repeat a maximum of two 300- or 400-level courses required in the major, which includes 300- and 400-level courses in the business core, required MGMT courses, and all elective courses required for the major.

Students who want to repeat a MGMT course will be permitted to enroll in that course only during add/drop and if there is space available.

Major in Management (B.S.)

Business Core (45-50)

Emphasis 1. Organizational Management

Requirements in Department (24)

MGMT 335 - Organizational Behavior (3)
MGMT 346 - Business Communication (3)
MGMT 355 - Human Resource Management (3)
MGMT 447 - Leadership (3)
MGMT 457 - Managerial Decision Making (3)
MGMT 477 - Managing Organizations in Competitive Environments (3)
MGMT 487 - Multinational Management (3)
One of the following (3)
- ACCY 306 - Financial Accounting Information for Business Decisions (3)
- MGMT 301 - Business and Society (3)
- MGMT 437 - Entrepreneurship (3)
- MGMT 448 - Employment Law (3)
- MKTG 348 - Integrated Marketing Communications (3)
- MKTG 467 - Global Marketing Management (3)
- OMIS 327 - Operations Analysis (3)

Total Hours for Emphasis 1, Organizational Management: 69-74

Emphasis 2. Human Resource Management

Requirements in Department (24)

MGMT 335 - Organizational Behavior (3)
MGMT 346 - Business Communication (3)
MGMT 355 - Human Resource Management (3)
MGMT 436 - Compensation and Benefits Administration (3)
MGMT 438 - Human Resource Planning and Staffing (3)
MGMT 444 - Training and Development (3)
MGMT 448 - Employment Law (3)
One of the following (3)
- MGMT 498 - Equal Opportunity and Employment (3)
- PSYC 471 - Industrial-Organizational Psychology (3)
- TECH 402 - Industrial Training and Evaluation (3)
- TECH 434 - Human Factors in Industrial Accident Prevention (3)
- TECH 435 - Legal Aspects of Safety (3)
- TECH 436 - Design and Administration of Industrial Safety Programs (3)
- TECH 437 - Fundamentals of Industrial Hygiene (3)

Total Hours for Emphasis 2, Human Resource Management: 69-74

Internship in Management

Management majors of junior standing are encouraged to apply for an internship. Applications are evaluated by the departmental chair and internship coordinator on the basis of a minimum 2.75 overall GPA and a 3.00 GPA or above in the major, references from the department, rapport with and recommendations from the business community, and relevance of the proposed internship to professional career needs. Internships of variable S/U credit hours (1-6) can be arranged. Internships are available through participating enterprises and student professional organizations. All internships are approved by the department and supervised by the internship coordinator. Credit will not be granted for purposes of satisfying management elective requirements. Additional information for submitting applications and preparing proposals is available in the department office.

Course List

101. INTRODUCTION TO BUSINESS AND ENTREPRENEURSHIP (3). Background information for students specializing in business subjects. Provides an opportunity to develop concepts, attitudes, and philosophies about business and entrepreneurship. Not open to majors in the College of Business.

217. LEGAL ENVIRONMENT OF BUSINESS (3). Study of the nature of the legal system in which society functions, including basic business agreements, business entities, and government regulation.

301. BUSINESS AND SOCIETY (3). Development of an understanding of the complex and important ways in which business affects and is influenced by its societal environment. Topics include social, political, and economic constraints on decision making for the firm and the effects business has on society in its role as employer, producer, and corporate citizen. PRQ: Grade of C or better in UBUS 310 and UBUS 311.

333. PRINCIPLES OF MANAGEMENT (3). Fundamental considerations of planning, organizing, actuating, controlling, and ethical implications of management practice. Application of principles and techniques to all organizations, including those of business, government, and not-for-profit organizations. Not open to majors in the College of Business. PRQ: PSYC 102 and junior or senior standing.

335. ORGANIZATIONAL BEHAVIOR (3). Theories and concepts related to human behavior in organizations at the individual, interpersonal, group, and organizational levels. Application of these theories and concepts to managerial problems and opportunities. PRQ: MGMT 333 or UBUS 310 and UBUS 311, or consent of department.

346. BUSINESS COMMUNICATION (3). Development of effective communication skills for a variety of business situations. Application of basic communication skills and human relations principles to planning, organizing, and producing letters, reports, and oral presentations. PRQ: COMS 100, ENGL 104 or ENGL 105, and junior standing (all majors). CRQ: UBUS 310 (business majors only).

355. HUMAN RESOURCE MANAGEMENT (3). Introduction to human resource management principles, processes and systems. Analysis of the components of human resource management including organizational assessment and human resource planning; recruitment and selection, compensation and benefits administration, training and development, employee relations, program utility analysis, human resource management information systems, computer integration in human resource programs, and employment laws. PRQ: MGMT 333 or UBUS 310 and UBUS 311, or consent of department.

387. INTERNATIONAL STUDY IN MANAGEMENT (3). Short-term study abroad experience to study cultural differences, problems, issues, trends, and practices in management within the international environment. Includes visits to foreign organizations, presentations by organizational managers and executives, and discussions with foreign and domestic international faculty. Supervised by department faculty member. PRQ: UBUS 310 or MGMT 333, or consent of department.

395. CAREER PLANNING IN MANAGEMENT (1). Career planning and job search skills unique to business administration and management majors. Topics include self-assessment, job search, personal development, career paths, career management, relocation issues, international assignments, business etiquette, business ethics, mentoring, and business cultures. S/U grading. PRQ: Grade of C or better in UBUS 310 and UBUS 311.

412. BUSINESS LAW (3). Commercial transactions, basic legal concepts of commercial paper, sales, secured transactions, and related topics. Uses case materials and problems. PRQ: MGMT 217, accountancy major, or consent of department.

413. LEGAL AND ETHICAL CONSTRAINTS ON BUSINESS CONDUCT (3). Study of legal and ethical constraints on conduct in the corporate setting. Includes a close examination of relevant statutes and discussion of current issues in the regulation of corporate behavior. PRQ: Grade of C or better in UBUS 310 and UBUS 311.

436. COMPENSATION AND BENEFITS ADMINISTRATION (3). Design and implementation of organizational compensation systems. Integration of internal equity and external market considerations in wage systems through use of job evaluations and market surveys. Compensation as a means of effective recruitment, motivation, and retention of employees. Benefits program design, cost containment, and program management. Performance appraisal processes and implementation of merit systems. Statutes affecting compensation practices (e.g., minimum wage laws, unemployment compensation, worker's compensation). PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

437. ENTREPRENEURSHIP (3). Understanding requirements of establishing a new venture or managing a small business. Multiple functions within the firm emphasizing those that contrast with established firms. PRQ: Grade of C or better in UBUS 310 and UBUS 311 or grade of C or better in MGMT 217, MGMT 333, MKTG 310, and FINA 320, or consent of department.

438. HUMAN RESOURCE PLANNING AND STAFFING (3). Recruitment and selection process in organizations. Methods of job analysis used in determining requisite knowledge, skills, and abilities for job performance. Development of internal and external recruitment strategies. Choice and validation of selection devices. Calculation and analysis of selection utility. Recruitment and selection in both line and staff capacities. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

439. HUMAN RESOURCE MANAGEMENT POLICIES (3). Legal aspects of human resource management policies and problems. Management challenges in coping with and operating within governmental regulations. Reconciliation of union and management policies. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

442. ORGANIZATION DESIGN (3). Theory and practices of designing and managing business organizations. Impact of the organizational design determinants of size, technology, environment, and human factors on business structure. Investigation of interdependence between design determinants and issues of centralization and control. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

443. SEMINAR IN ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT(1 to 6). Intensive study of problems and issues unique to managing small businesses. Exploration of various topical alternatives. May be repeated to a maximum of 6 semester hours. Permit only. PRQ: MGMT 437.

444. TRAINING AND DEVELOPMENT (3). Training needs analysis at organizational, task, and individual levels. Design, implementation, and evaluation of training and development systems. Evaluation of types of training media. Coordination and integration of employees' development with organizational human resource planning. Broad-scale organization development efforts. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

447. LEADERSHIP (3). Understanding how to use leadership skills to exercise influence for improving personal, interpersonal, and organizational effectiveness and performance. Self-assessment, skill development, case analysis, and interpersonal exercises used to improve understanding of topics such as empowerment, vision, team leadership, and contrasts between management and leadership. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

448. EMPLOYMENT LAW (3). Legal environment and regulatory process in human resource management. Specific areas of study include management rights to discipline and discharge, employee rights to organize and engage in concerted activity, the legal framework of contract negotiations and administration, fair employment practices, and other selected legal influences. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

450. ORGANIZATIONAL PLANNING AND QUALITY (3). Principles, practices, and procedures of long-range and short-range planning; theory and practice of organizational decision making, with emphasis on individual, group, authority, structure, environment, information system components, and quality management. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

457. MANAGERIAL DECISION MAKING (3). Analysis of the processes used by individuals, groups, and organizations to make both unilateral and bilateral managerial decisions, as well as the development of skills to enhance managerial decision making. PRQ: Management major and grade of C or better in MGMT 335 and MGMT 355.

458. INTERNSHIP IN MANAGEMENT (1 to 6). Student works full time for a half-semester, a summer, or a semester as an intern in a business firm under the supervision of the staff of the College of Business. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

460H. MANAGEMENT HONORS (3). An integrating course dealing with problems of management that embrace all of the management functions. Investigation of models, concepts and research findings of particular significance to effective decision making in management. Intended for students who desire to do advanced work or pursue some special investigation of a management problem not specifically covered elsewhere. Open only to senior students who are in their last semester. PRQ: Overall university GPA of at least 3.00, management major area GPA of 3.20 or higher, and consent of department.

468. STRATEGIC MANAGEMENT (3). Strategy formulation and implementation at the business and corporate levels. Emphasis on developing an understanding of the administration of business firms from a top-management perspective and application of strategic management concepts to real-world management issues in both domestic and global environments. A capstone course designed to integrate and apply functional business courses to strategic business problems. Strategy cases and a comprehensive business simulation

used to develop and apply knowledge of strategic analysis, top-management decision making, and strategic change. PRQ: Senior standing and ACCY 331 (for ACCY majors); FINA 330, FINA 340, and FINA 350 (for FINA majors); MGMT 335 and MGMT 355 (for MGMT and business administration majors). CRQ: OMIS 498 (for OMIS majors); MKTG 495 (for MKTG majors); or consent of department.

477. MANAGING ORGANIZATIONS IN COMPETITIVE ENVIRONMENTS (3). Theory and practice of designing and managing organizations in multiple stages of the life cycle. Strategic change and innovation and role of technology in developing industries and managing organizations. Impact of different industry conditions, strategies, and technologies on structure and control systems. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355. CRQ: MGMT 468.

487. MULTINATIONAL MANAGEMENT (3). Opportunities and challenges of managing a business and/or organization in an international business environment. Theories and research findings useful to understanding the environmental and managerial aspects of multinational corporations. Provides a foundation for exploring career opportunities in international business. PRQ: Management major and a grade of C or better in MGMT 335 and MGMT 355.

495. INDEPENDENT STUDY IN MANAGEMENT (1 to 4). Special readings, topics, or projects in management. May be repeated to a maximum of 4 semester hours. PRQ: Senior standing, grade of C or better in UBUS 310 and UBUS 311, and consent of department.

498. EQUAL OPPORTUNITY AND EMPLOYMENT (3). In-depth presentation of management, union, and individual perspectives of the causes and remedies of employment-based discrimination. Topics include recruiting, promoting, seniority, discrimination, affirmative action, and testing. PRQ: Grade of C or better in MGMT 335 and MGMT 355.

Management Faculty

Sarah J. Marsh, Ph.D., University of North Carolina, associate professor, chair
Madan Annavarjula, Ph.D., Temple University, assistant professor
Curtiss K. Behrens, LL.M., DePaul University, associate professor
Terrence R. Bishop, Ph.D., University of Iowa, associate professor
Jon P. Briscoe, D.B.A., Boston University, associate professor
Paula E. Brown, Ed.D., Northern Illinois University, associate professor
Luis G. Flores, Ph.D., Texas Tech University, associate professor
Charles R. Gowen, Ph.D., Ohio State University, professor
Stephanie Henagan, PH.D., Lousiana State University, assistant professor
Marvin F. Hill, Jr., J.D., Ph.D., University of Iowa, professor
C. Lynn Neeley, Ph.D., University of Tennessee, professor
Devaki Rau, Ph.D., University of Minnesota, assistant professor
David R. Wade, J.D., University of Iowa, associate professor
Harold O. Wright, Jr., J.D., University of Illinois, assistant professor
Daniel R. Wunsch, Ph.D., University of California, Los Angeles, professor

Department of Marketing (MKTG)

The Department of Marketing offers a B.S. degree with a major in marketing. The marketing major prepares students for careers which involve planning, implementing, organizing, and/or controlling the activities required in the exchange of goods and services with customers. The major provides students with the conceptual, analytical, communication, and quantitative skills necessary for careers in marketing. Students may pursue a general marketing plan of study or one of two areas of study. Areas of study focus on a distinct area of marketing and prepare students for careers in those specific fields.

The professional sales area of study offers students instruction dedicated to preparing them for entry-level sales positions and careers in sales management. Courses provide students with concepts of selling theory, applied skills, and frequent in-class and out-of-class contact with professional business people, including a Sales Advisory Board.

The interactive marketing area of study offers students a curriculum to prepare for careers with direct marketing service bureaus, direct marketing production houses, Web marketers, advertising agencies, and corporations using interactive marketing, direct marketing, or Web-based marketing. Dedicated laboratory facilities provide students with hands-on training in database analysis, Web-based marketing technologies, and geodemographic information systems.

Department Requirements

The Department of Marketing's retention policy is competitive based on a student's overall GPA and satisfactory completion of UBUS 310 as evidenced by a grade of C or better. To graduate as a marketing major, a student must earn a grade of at least C in each required MKTG course.

All marketing majors must satisfactorily complete a portfolio of a selected collection of their marketing assignments to be turned in no later than the last week of classes in the semester that they graduate. Instructions for portfolio content may be found in the Department of Marketing.

To graduate as a marketing major or with a marketing minor, a transfer student will be required to take at least 12 semester hours of 300- and 400-level MKTG courses at NIU.

Marketing majors and minors may repeat a maximum of two 300- or 400-level MKTG courses.

Major in Marketing (B.S.)

Business Core (45-50)

Requirements in Department (21-24)

MKTG 99 - Portfolio (0)
MKTG 325 - Buyer Behavior (3)
MKTG 350 - Principles of Selling (3)
MKTG 443 - Marketing Research (3)
MKTG 495 - Marketing Strategy (3)
Electives in marketing or one of the following areas of study (9-12)[1]

Interactive Marketing (12)

MKTG 355 - Direct Marketing (3)
MKTG 370 - Internet Marketing (3)
Two of the following (6)
- MKTG 348 - Integrated Marketing Communications (3)
- MKTG 455 - Database Marketing Management (3)
- MKTG 470 - Interactive Marketing Technology (3)

Professional Sales (9)

MKTG 435 - Business-to-Business Selling (3)
MKTG 446 - Sales Management (3)
MKTG 450 - Advanced Professional Selling (3)

Requirement outside Department (3)

MGMT 346 - Business Communication (3)

Total Hours for a Major in Marketing: 69-77

Minor in Marketing (24-34)

New students are currently not being admitted to the minor in marketing.

Retention in the marketing minor is competitive based on the student's overall GPA and a grade of C or better in UBUS 310 or MKTG 310. Students wishing to apply for the minor in marketing must complete an application by the semester deadline; applications and deadline dates are available in the Department of Marketing. Students in the marketing minor must receive a grade of C or better in each of the required marketing courses and required marketing electives.

Pre-admission Requirements (9-10)

ECON 260 - Principles of Microeconomics (3)
PSYC 102 - Introduction to Psychology (3)
UBUS 223 - Introduction to Business Statistics (3),
- OR STAT 350 - Introduction to Probability and Statistics (3),
- OR STAT 301 - Elementary Statistics (4)

Requirements (15-24)

MKTG 310 - Principles of Marketing (3),
- OR UBUS 310 - Business Core: Lecture (9), and UBUS 311 - Business Core: Applications Seminar (3)

MKTG 350 - Principles of Selling (3)
MKTG 443 - Marketing Research (3),
- OR MKTG 325 - Buyer Behavior (3)

Two of the following (6)
- MKTG 325 - Buyer Behavior (3)
- MKTG 345 - Business Marketing (3)
- MKTG 348 - Integrated Marketing Communications (3)
- MKTG 355 - Direct Marketing (3)
- MKTG 364 - Product Planning and Development (3)
- MKTG 365 - Principles of Retailing (3)
- MKTG 367 - Principles of Global Marketing (3)
- MKTG 370 - Internet Marketing (3)
- MKTG 425 - Services Marketing (3)
- MKTG 443 - Marketing Research (3)
- MKTG 446 - Sales Management (3)
- MKTG 450 - Advanced Professional Selling (3)
- MKTG 455 - Database Marketing Management (3)
- MKTG 467 - Global Marketing Management (3)
- MKTG 490 - Current Topics in Marketing (3)

[1] Credits earned in MKTG 458, Internship in Marketing, may not be used to complete the elective requirement.

Internship in Marketing

Marketing majors may submit an application for a marketing internship in their junior or senior year, preferably by February 1, for a summer internship. Applications will be reviewed by the departmental internship coordinator and approved on the basis of academic GPA (of approximately 2.75 overall GPA and approximately 3.00 GPA or above in the major), instructor recommendations, professional promise, demonstrated interest, and the completion of a minimum of 6 semester hours of marketing taken at NIU. Credit earned in the internship may not be used to fulfill the 9 semester-hour marketing electives requirement. Internships are available in leading companies selected by the internship coordinator. A student receives 3-6 semester hours of S/U credit for the internship based on a planned series of learning activities arranged and approved by the internship coordinator.

Course List

99. PORTFOLIO (0). Portfolio of student's work demonstrating proficiency of marketing concepts as described in the learning objectives. Required of all undergraduate marketing majors. Students will be given portfolio instructions during the first semester of the upper-level major program. The completed portfolio is due during the end of the semester of graduation. S/U grading. CRQ: MKTG 495.

310. PRINCIPLES OF MARKETING (3). Basic understanding of marketing and the operation of marketing systems. Focus on the firm managing its marketing efforts and its relation to society and the world. Topics include evaluating market opportunities; buyer behavior; market segmentation, targeting, and positioning; market strategy and planning; development of marketing mix; and marketing organization and control. Not open to majors in the College of Business. PRQ: Junior standing.

325. BUYER BEHAVIOR (3). Analysis of consumer and organizational decision making based on theories from the behavioral sciences. Attention given to the how and why of purchasing decisions and pre-purchase deliberation. Emphasis on the use of buyer behavior to develop marketing strategy. PRQ: MKTG 310 or UBUS 310.

345. BUSINESS MARKETING (3). Basic understanding of creating marketing exchanges among institutions, organizations, and individuals for purposes other than consumption. Focus on buying processes, buying influences, institutional relationships, and ethical exchange management activities. PRQ: MKTG 310 or UBUS 310.

348. INTEGRATED MARKETING COMMUNICATIONS (3). Survey of marketing communications as a tool for making and implementing marketing decisions. Emphasis on communication strategy formulation and development of the promotion mix. Topics include advertising, public relations, sales promotions, direct marketing, and personal selling. PRQ: MKTG 310 or UBUS 310.

350. PRINCIPLES OF SELLING (3). Emphasis on personal and professional development, interpersonal skills, verbal and written presentation skills, understanding sales and buying processes, and developing and maintaining customer satisfaction. Topics include developing trust and rapport, consultative selling, prospecting, and territory and account management. PRQ: MKTG 310 or UBUS 310.

355. DIRECT MARKETING (3). Survey of all aspects of direct marketing. Traditional direct marketing topics including direct mail, retail direct marketing, print media, and list management. Current topics including electronic media, strategic database marketing, and privacy issues. PRQ: MKTG 310 or UBUS 310.

364. PRODUCT PLANNING AND DEVELOPMENT (3). Examination of the factors influencing product planning and pricing decisions of the firm from idea generation to market introduction. Topics include idea generation, concept testing, pricing strategy, industry and market analysis, and test marketing. PRQ: MKTG 310 or UBUS 310.

365. PRINCIPLES OF RETAILING (3). *Crosslisted as FCNS 365X.* Study of retail institutions; store organization, location strategy, merchandising, inventory control, customer communication, price determination, and the management of retail salespersons. PRQ: MKTG 310 or UBUS 310.

367. PRINCIPLES OF GLOBAL MARKETING (3). Study of marketing emphasizing the role global business plays in the success of companies and nations. Includes issues pertaining to the marketing mix in a global business environment along with economic, political, and legal conditions. In-depth discussion of their relevance to the U.S. economy. PRQ: MKTG 310 or UBUS 310.

370. INTERNET MARKETING (3). Introduction to business functions using the Internet. Topics include the World Wide Web, discussion groups, email, the different functions and applications of the Internet, and how interactive technologies have changed business and consumer practices. Emphasis on the effect of the use of interactive technology on a company's existing market mix and current and potential uses of the Internet for marketing tactics and strategies. PRQ: MKTG 310 or UBUS 310.

395. CAREER MARKETING (1). Designed to help students explore career opportunities, successfully job hunt, and become acquainted with the business environment. Job search strategies, setting career goals, business ethics, business communication skills, and business etiquette. Open only to marketing majors or by consent of department. S/U grading. PRQ: MKTG 310 or UBUS 310.

425. SERVICES MARKETING (3). Analysis of how services marketing differs from goods marketing and how services marketers can effectively manage the elements of service delivery to enhance service quality and customer satisfaction. Topics include the distinct elements of services marketing, service quality determination, understanding customer expectations, designing service standards to meet customer expectations, managing contact personnel's delivery to service standards, and matching service communications with service delivery. PRQ: MKTG 310 or UBUS 310, and MKTG 325 or FCNS 468, or consent of department.

435. BUSINESS-TO-BUSINESS SELLING (3). Developing business-to-business selling processes over the telephone (inside selling) with particular emphasis on pre-call planning, prospecting and qualifying, developing value statements, and follow-up. Introduction to and hands-on application of a Customer Relationship Management (CRM) system and other technologies. Students build and maintain a database related to the sales program. PRQ: MKTG 350.

443. MARKETING RESEARCH (3). Research methods as applied to the field of marketing including problem definition, research design, survey design, data collection and analysis, and presentation of results. PRQ: MKTG 310 or UBUS 310 and UBUS 311, and UBUS 223 or STAT 301 or STAT 350.

446. SALES MANAGEMENT (3). Responsibilities and functions of the sales manager including an evaluation of sales organizational structures, recruiting, selecting, testing, and training of salespeople; related topics include compensation plans, controlling expenses, sales forecasting, budgets, routing, quotas, ethics, and motivation. PRQ: MKTG 350.

450. ADVANCED PROFESSIONAL SELLING (3). Focus on major account selling, coordination between a salesperson and the firm's other functional areas, team selling, negotiation, career management, and personal productivity. Student presentations in group settings, exposure to software which aids salespeople, close work with an actual salesperson, and relation of theory to practice. PRQ: MKTG 350 and consent of department.

455. DATABASE MARKETING MANAGEMENT (3). Intensive examination of the concepts and tools to manage and utilize a marketing information system. Emphasis on using database information in a marketing context. Topics include sources of marketing data, the use of statistical tools to identify marketing opportunities, the use of mapping tools in marketing, and an introduction to neural networking and its use in marketing information systems. PRQ: MKTG 355 or consent of department.

458. INTERNSHIP IN MARKETING (3 to 6). Full-time work for a summer or a semester as a marketing intern in a business firm under the supervision of a coordinator from the Department of Marketing faculty. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Consent of department.

467. GLOBAL MARKETING MANAGEMENT (3). Examination of the strategic aspects of global marketing with focus on developing and analyzing marketing strategies for multinational corporations using an experiential learning approach. PRQ: UBUS 310 and UBUS 311.

470. INTERACTIVE MARKETING TECHNOLOGY (3). Analysis of the technology used to support interactive marketing systems for business-to- business and business-to-customer marketing strategies. Topics include Web page design and implementation, collection and analysis of customer information, and ethical, privacy, and security issues. Applications-oriented approach requiring students to use software to create and implement a marketing Web page and perform many of the hardware related tasks of interactive marketing. PRQ: UBUS 310 or MKTG 310, and MKTG 370.

490. CURRENT TOPICS IN MARKETING (3). Study of new developments in marketing including current topics and issues. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

491. INDEPENDENT STUDY IN MARKETING (1 to 3). Studies conducted through special readings or projects in topics in marketing. PRQ: UBUS 310, UBUS 311, and consent of department.

495. MARKETING STRATEGY (3). Emphasizes each activity within the total process of marketing, including strategy formulation, planning, programming, and implementation, by using case analysis to gain an understanding of all aspects of marketing strategy and management. PRQ: Senior standing and MKTG 443; marketing major or consent of department.

499H. INDIVIDUAL STUDY (3). Open only to Phase II honors students. Independent project with faculty guidance. May include one or more of the following: problem formulation, background investigation of a topic, research design, empirical data collection, analysis and presentation of conclusions. PRQ: Consent of department.

Marketing Faculty

Denise D. Schoenbachler, Ph.D., University of Kentucky, professor, OTA/Off the Record Research Professor of Marketing Research, chair

Timothy W. Aurand, Ph.D., Northern Illinois University, associate professor

Elisa Fredericks, Ph.D., University of Illinois, Chicago, assistant professor

Geoffrey L. Gordon, Ph.D., University of Kentucky, professor, OTA/ Off the Record Research Professor of Investment Research

Kimberly M. Judson, Ph.D., University of Illinois, assistant professor

Rick E. Ridnour, Ph.D., Iowa State University, Presidential Teaching Professor

Tanuja Singh, D.B.A., Southern Illinois University, associate professor

Jay S. Wagle, Ph.D., University of Nebraska, professor

Dan C. Weilbaker, Ph.D., University of South Carolina, professor, McKesson Pharmaceutical Group Professor of Sales

Debra L. Zahay, Ph.D., University of Illinois, assistant professor, Acxiom Corporation Professor of Interactive Marketing

Department of Operations Management and Information Systems (OMIS)

The Department of Operations Management and Information Systems prepares students for professional careers relating to the analysis, design, implementation, and management of operations and information systems in organizations. The operations and information management program stresses the integration of the areas of business operations, information systems, and logistics, and the related use of information technology, to prepare students for significant entry-level positions in the new economy. Exposure to the areas of operations analysis, supply chain management, project management, and other leading-edge information technologies, and participation on several team projects, provide students with the knowledge, communication skills, and leadership experience that are demanded by the professional business community.

Department Requirements

Satisfactory completion of UBUS 310 as evidenced by a grade of C or better is required before a student majoring in operations and information management is allowed to enroll in any 300- or 400-level OMIS course (except OMIS 327 and OMIS 351). To be retained as a major in the department, a student may not repeat more than two OMIS courses.

All operations and information management majors must satisfactorily complete a portfolio of a selected collection of their operations management and information systems assignments to be turned in no later than the last week of classes in the semester that they plan to graduate. Instructions for portfolio content may be found in the Department of Operations Management and Information Systems.

To graduate with a major in operations and information management, a student must earn a grade of at least C in each of the following courses: OMIS 300, OMIS 327, OMIS 340T, OMIS 352 or OMIS 452, OMIS 462, and OMIS 498.

Upper-level (300- or 400-level) OMIS courses will not be accepted from other educational institutions without permission from the department.

OMIS 458, Internship in Operations and Information Management, cannot be permanent employment nor taken as the last course in the program and cannot be applied as elective credit in the program.

Major in Operations and Information Management (B.S.)

Business Core (45-50)

Requirements in Department (31-33)

OMIS 99 - Portfolio (0)
OMIS 300 - Career Planning in Operations and Information Management (1)
OMIS 327 - Operations Analysis (3)
OMIS 340T - Supply Chain Management (3)
OMIS 452 - Database Management for Business (3)
OMIS 462 - Business Systems Development (3)
OMIS 498 - Operations and Information Management (3)
Five of the following (15-17)
- CSCI 240 - Computer Programming in C++ (4)
- CSCI 250 - Computer Programming in Cobol (4)
- OMIS 352 - Business Information Technologies (3)
- OMIS 379 - Business Applications of Geographic Information Systems (3)
- OMIS 421 - Business Computer Simulation (3)
- OMIS 439 - Inventory Management (3)
- OMIS 440 - Capacity Planning and Scheduling (3)
- OMIS 442 - Quality Management (3)
- OMIS 443 - Continuous Improvement Systems (3)
- OMIS 444 - Manufacturing Technology Management (3)
- OMIS 449 - Business Computing Environments (3)
- OMIS 450 - Service Operations (3)
- OMIS 455 - Enterprise Resource Planning (3)
- OMIS 460 - Telecommunications for Business (3)
- OMIS 465 - Procurement (3)
- OMIS 471 - Business Forecasting (3)
- OMIS 475 - Electronic Business Technologies (3)
- OMIS 478 - Supply Chain Systems (3)
- OMIS 480 - Seminar in Supply Chain Management (3)
- OMIS 485 - Business Technology Projects (3)

Requirements outside Department (3)

MGMT 346 - Business Communication (3)

Total Hours for a Major in Operations and Information Management: 79-86

Recommendations

Students are urged to obtain an adequate mathematical sciences background. Students are strongly encouraged to complete OMIS 300 during their junior year.

Students selecting a career in business information systems are advised to complete both CSCI 240 and CSCI 250 in their programs of study.

Degree with Honors

The Department of Operations Management and Information Systems Honors Program is designed to provide exceptional students an opportunity to conduct an in-depth exploration of topics pertinent to operations management, information systems, or business quantitative methods. This program is intended to support the general mission of the University Honors Program with the specific goal of providing students a deeper understanding of business operations. The program is administered by the coordinator of the Department of Operations Management and Information Systems Honors Program.

Interested students are encouraged to apply for admission to the Department of Operations Management and Information Systems Honors Program. Application forms are available in the department office. Entering freshmen graduating in the top ten percent of their high school classes with a minimum composite ACT score of 27 or SAT score of 1220 are encouraged to participate in the program. Continuing students should have a cumulative GPA of at least 3.20 in order to be considered for admission.

Graduation with honors in operations and information management requires that the student be a declared major in operations and information management. The student must maintain at least a 3.20 cumulative university GPA and a 3.50 or higher GPA in departmental course work. The student must successfully complete at least 12 semester hours of business honors courses including UBUS 499H, Introduction to Business Research, with a minimum grade of B and OMIS 495H, Independent Study in Operations and Information Management, as a senior honors thesis.

Should the student's GPA fall below the minimum requirements for an academic term, the student must achieve these standards no later than the end of the following semester to remain in the program.

The senior honors thesis must be approved by a thesis committee consisting of the student's thesis adviser and at least one other faculty member. For students attempting University Honors, the thesis may be completed in concurrence with the University Capstone project.

Internships in Operations and Information Management

Operations and information management majors of junior-year standing are encouraged to apply for the department internship program. Applications are evaluated by the department chair and internship coordinator on the basis of a minimum 2.75 overall GPA and a 3.00 GPA or above in the major, recommendations from the business community, and relevance of the proposed internship to professional career needs. Individual internships of 3 semester hours may be repeated for a maximum of 6 semester hours of internship credit. All internships must be approved by the department and supervised by the internship coordinator. In order to gain the full benefit of an internship experience, enrollment in the program will be limited to those positions created as internships or cooperative education experiences. Permanent positions will not count as internships. Credit earned in this program may not be used to satisfy operations and information management elective requirements. Additional information regarding the operations and information management internship program is available in the department office.

Course List

99. PORTFOLIO (0). Portfolio of student's work demonstrating proficiency of operations management and information systems concepts as described in the learning objectives. Required of all undergraduate operations management and information systems majors. Students will be given portfolio instructions during the first semester of the upper-level major program. The completed portfolio is due near the end of the semester of graduation. S/U grading. CRQ: MGMT 468.

259. INTRODUCTION TO BUSINESS INFORMATION SYSTEMS (3). Overview of the hardware, software, and processing concepts of business information systems. Emphasis on the use of integrated software packages in the solution of a variety of business problems. Laboratory assignments in using word processing, spreadsheet, and data base software.

300. CAREER PLANNING IN OPERATIONS AND INFORMATION MANAGEMENT (1). Career planning and job search skills of benefit to students in their initial employment search and throughout their careers. Topics include but are not limited to researching a company, writing a resume and cover letter, and interviewing techniques. PRQ: Operations and information management major and UBUS 310, or consent of department.

327. OPERATIONS ANALYSIS (3). Study of the tools, models, and quantitative techniques used in the operations management discipline. Topics include forecasting, inventory models, queuing theory, statistical models, decision theory, mathematical programming, simulation, and project management. PRQ: MATH 211 or MATH 229; and UBUS 223 or STAT 301 or STAT 350; or consent of department. CRQ: UBUS 310.

338. PRINCIPLES OF OPERATIONS MANAGEMENT (3). Examination of issues, problems, and possible solutions for operations managers in the manufacturing and service environments. Topics include process design, capacity and facility planning, quality management, materials management, and an introduction to production and operations planning and control systems. Not open to majors in the College of Business. PRQ: Junior standing, MATH 210 or MATH 211 or MATH 229, STAT 301 or STAT 350 or UBUS 223.

340T. SUPPLY CHAIN MANAGEMENT (3). Comprehensive study of concepts, processes, and strategies used in the development and management of global supply chains. Topics include procurement, electronic commerce, information technologies, global supply chain management, and logistics activities. PRQ: UBUS 310, OMIS 327, and OMIS 351, or consent of department. CRQ: UBUS 311.

351. INFORMATION SYSTEMS IN ORGANIZATIONS (3). Examination of functional management information systems (MIS) existing within organizations. Emphasis on analyzing and designing computer systems for functional areas. Need for integration of these systems stressed through the use of case studies. PRQ: Working knowledge of spreadsheet software, UBUS 223, or consent of department. CRQ: UBUS 310.

352. BUSINESS INFORMATION TECHNOLOGIES (3). Advanced application of information technology development tools and techniques to enhance individual and group problem solving and critical thinking skills. Focus on developing seamless and integrated business applications using the latest development techniques and tools. PRQ: OMIS 351, UBUS 310, or consent of department. CRQ: UBUS 311.

379. BUSINESS APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS (3). Examination of leveraging an organization's spatial data to analyze and solve business problems. Extensive computer laboratory work designing business geographic services using commercially available software. PRQ: GEOG 256 or OMIS 351, or consent of department.

400. INTERNATIONAL STUDY IN OPERATIONS AND INFORMATION MANAGEMENT (3). Short-term study abroad experience to study significant concepts and problems of operations and information management in the international environment. Analysis of global operational issues through visitation and study of foreign organizations under the supervision of a department faculty member. S/U grading. PRQ: UBUS 311, operations and information management major, or consent of department.

421. BUSINESS COMPUTER SIMULATION (3). Study of discrete-event simulation modeling in the business environment. Topics include problem formulation, data collection and analysis, model development, model verification and validation, model experimentation and optimization, output analysis, and implementation of simulation results. Extensive laboratory experience with current simulation languages and simulators. PRQ: UBUS 310, OMIS 327, OMIS 351, or consent of department. CRQ: UBUS 311.

425. INTEGRATED INFORMATION TECHNOLOGIES IN BUSINESS (3). Examination of client/server concepts, components, and operation as related to the business environment. Topics include major business operating system platforms, relational database designs, structured query language (SQL), trends in database products and applications, and local and wide-area networking technologies used in business. Not recommended for operations and information management majors in the information systems area of study. PRQ: UBUS 310, OMIS 351 or ACCY 310, or consent of department. CRQ: UBUS 311.

439. INVENTORY MANAGEMENT (3). Detailed examination of the materials management issues facing production/inventory control managers. Topics include independent inventory systems, economic order quantities, purchasing, aggregate inventory management, with emphasis on dependent demand systems, MRP (Materials Requirements Planning) principles, modules, and system details including implementation issues. PRQ: UBUS 310, OMIS 327, or consent of department. CRQ: UBUS 311.

440. CAPACITY PLANNING AND SCHEDULING (3). Detailed examination of the capacity planning and operational scheduling issues in manufacturing environments. Topics include capacity planning factors, bills of capacity, rough cut capacity planning, loading, capacity requirements planning (CRP), finite operational scheduling, mass production manufacturing, database requirements, and relevant computer systems including shop floor control/production reporting systems. PRQ: UBUS 310, OMIS 327, or consent of department. CRQ: UBUS 311.

442. QUALITY MANAGEMENT (3). Detailed examination of the issues, techniques, and methodologies for planning and controlling quality in a manufacturing organization. Topics include evolutionary operation,

orthogonal arrays, design of experiments, quality standards, vendor certification, total quality control, and quality function deployment. Emphasis on the quality paradigms of Feigenbaum, Taguchi, Juran, and Deming. PRQ: UBUS 310, OMIS 327, or consent of department. CRQ: UBUS 311.

443. CONTINUOUS IMPROVEMENT SYSTEMS (3). Continuous improvement in both service and manufacturing firms with the focus on managerial problem solving and emphasis on philosophies and methodologies in experimental design. Topics include the Shewhart Cycle, Deming, fractional factorials, Taguchi designs, EVOP, and response surfaces. PRQ: UBUS 310, OMIS 327, or consent of department. CRQ: UBUS 311.

444. MANUFACTURING TECHNOLOGY MANAGEMENT (3). Detailed investigation of the quantitative issues related to the planning, control, and design of manufacturing and supply chain systems. Topics include materials management, capacity planning, and resource and product scheduling. PRQ: UBUS 310 or consent of department. CRQ: UBUS 311.

449. BUSINESS COMPUTING ENVIRONMENTS (3). Study of operating systems for various business computing environments. Comparison of micro, mini, and mainframe operating systems is presented for the purpose of selecting an appropriate environment and configuration. Laboratory experience with business operating systems. PRQ: CSCI 240 or CSCI 250, UBUS 310, OMIS 351, or consent of department. CRQ: UBUS 311.

450. SERVICE OPERATIONS (3). Analysis of the application of operations management concepts to service organizations. Strategic and tactical issues of managing service organizations, such as airline, financial, retail, health care, hotel/resort, and restaurant service delivery systems, will be examined. Topics include forecasting, location selection, layout design, labor scheduling, and capacity management as applied to service environments. PRQ: UBUS 310 or consent of department. CRQ: UBUS 311.

452. DATABASE MANAGEMENT FOR BUSINESS (3). Comparison of database management packages for business computers with laboratory exercises that deal with the development of business applications. Practical experience with the most current database management packages. PRQ: UBUS 310, OMIS 351, or consent of department. CRQ: UBUS 311.

455. ENTERPRISE RESOURCE PLANNING (3). In-depth analysis of current business enterprise systems; their system components, database, information requirements, and system interfaces. Commercial software used to illustrate the concepts presented. PRQ: OMIS 327, OMIS 351, or consent of department. CRQ: UBUS 311.

458. INTERNSHIP IN OPERATIONS AND INFORMATION MANAGEMENT(3 to 6). Full-time work for a semester or a summer as an intern in the operations or information systems function of an organization under the supervision of the department internship coordinator. A permanent full-time or part-time position will not be considered an internship. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: UBUS 310, OMIS 327, operations and information management major, and consent of department. CRQ: UBUS 311.

460. TELECOMMUNICATIONS FOR BUSINESS (3). Survey of various methodologies and techniques utilized in interfacing telecommunication systems within the business environment, along with the consideration of issues related to the management of these telecommunications systems. PRQ: CSCI 240 or CSCI 250, UBUS 310, OMIS 351, or consent of department. CRQ: UBUS 311.

462. BUSINESS SYSTEMS DEVELOPMENT (3). In-depth study of the concepts, methods, and tools used for business system development and project management. Topics include project design and estimating, the system development life cycle, change management, and quality assurance. PRQ: UBUS 310, OMIS 351, operations and information management major, or consent of department. CRQ: UBUS 311.

465. PROCUREMENT (3). In-depth study of the concepts, methods, and responsibilities of the purchasing function for manufacturing and service organizations. Topics include purchasing strategy and policies, price/cost analysis, supplier selection and evaluation, bidding and negotiation, materials management, and value analysis. PRQ: UBUS 310, OMIS 327, or consent of department. CRQ: UBUS 311.

471. BUSINESS FORECASTING (3). Principles, techniques, and applications for forecasting for business and industry. Topics include simple and multiple regression models, Box-Jenkins models, and exponential smoothing models. PRQ: OMIS 327, UBUS 310, or consent of department. CRQ: UBUS 311.

475. ELECTRONIC BUSINESS TECHNOLOGIES (3). Overview of electronic business technology including use of information technology tools to design and develop business-to-business applications. Impact of information technology design on electronic business strategy, planning, implementation, and operation. PRQ: CSCI 240 or CSCI 250, and OMIS 352, or consent of department.

478. SUPPLY CHAIN SYSTEMS (3). Intensive examination of decision systems for supply chain management. Supply chain strategy, supply chain analysis, and cross-functional solutions to supply chain problems. Emphasis on selection and use of information systems and decision models, and effective presentation of results. PRQ: OMIS 340T or consent of department.

480. SEMINAR IN SUPPLY CHAIN MANAGEMENT (3). Study of current and future developments, trends, and technologies in supply chain management. Contemporary readings, presentations, and projects used to define modern supply chain management practice and thought. PRQ: OMIS 340T or consent of department.

485. BUSINESS TECHNOLOGY PROJECTS (3). Instruction focused on supervised student team projects conducted within the operations, logistics, or information systems area of selected business organizations. PRQ: Consent of department.

495. INDEPENDENT STUDY IN OPERATIONS AND INFORMATION MANAGEMENT (1 to 3). Studies conducted through readings or projects in specialized topics of operations and information management. PRQ: OMIS 327, UBUS 311, senior standing, operations and information management major, and consent of department.

498. OPERATIONS AND INFORMATION MANAGEMENT (3). In-depth investigation of the major issues, problems, and solution methodologies of the operations and information management disciplines. Emphasis on case analyses that focus on the integration of operations and information management in a global competitive environment. PRQ: OMIS 340T, UBUS 311, operations and information management major, or consent of department.

Operations Management and Information Systems Faculty

Nancy L. Russo, Ph.D., Georgia State University, professor, chair
Gerald R. Aase, Ph.D., Indiana University, associate professor
Robert C. Beatty, D.B.A., Mississippi State University, assistant professor
Richard G. Born, Ph.D., Illinois Institute of Technology, associate professor
Charles E. Downing, Ph.D., Northwestern University, associate professor
Thomas M. Galvin, Ph.D., Illinois Institute of Technology, associate professor
Gyu Chan Kim, Ph.D., University of Nebraska, professor
Chang Liu, D.B.A., Mississippi State University, associate professor
Brian G. Mackie, Ph.D., University of Iowa, assistant professor
Jack T. Marchewka, Ph.D., Georgia State University, associate professor
Kathleen L. McFadden, Ph.D., University of Texas, Arlington, professor
Charles G. Petersen, Ph.D., Indiana University, associate professor
Gregory N. Stock, Ph.D., University of North Carolina at Chapel Hill, associate professor
William J. Tallon, Ph.D., University of Iowa, associate professor

College of Education

Christine K. Sorensen, Ph.D., dean
Diane H. Jackman, Ph.D., associate dean

The departments of the College of Education offer baccalaureate programs leading to the degrees Bachelor of Science (B.S.) and Bachelor of Science in Education (B.S.Ed.). The College of Education offers a contract major leading to the B.S. degree and the Bachelor of General Studies (B.G.S.) degree.

Department Names and Undergraduate Programs Offered

Department of Counseling, Adult and Higher Education

Department of Educational Technology, Research and Assessment

Department of Kinesiology and Physical Education
B.S. in kinesiology
B.S.Ed. in physical education

Department of Leadership, Educational Psychology and Foundations

Department of Literacy Education

Department of Teaching and Learning
B.S. in early childhood studies
B.S.Ed. in elementary education
B.S.Ed. in special education

ICTS Basic Skills Test

Successful completion of the Illinois Certification Testing System (ICTS) Basic Skills Test is required for entry into teacher certification programs in the College of Education and is listed as a prerequisite (PRQ) for many professional courses. The test bulletins and applications are available at the Office of Testing Services and in department offices. Students who intend to enter a teacher certification program need to take the ICTS Basic Skills Test as soon as possible.

Contract Major

The College of Education offers students opportunities for constructing two types of individualized programs of study which differ from the university's regular major and minor programs. These individualized programs, the B.S. contract major and the Bachelor of General Studies (B.G.S.) degree, utilize existing university courses.

Each of the two programs offered by the College of Education addresses a different set of educational objectives. The B.S. contract major allows a student with unusual and well defined academic interests to design a major with the advice of a faculty sponsor. The B.G.S. degree, by contrast, requires no formal major; it is a minimally structured program built around a general curriculum of courses offered primarily in the College of Education. The B.G.S. degree is expected to appeal primarily to mature students with broad academic interests whose educational objectives may not include preparation for a specific professional career.

Requirements for the B.S. Contract Major

A student may formulate a proposal for a major program of study appropriate to the College of Education which differs substantially from existing major programs but utilizes existing courses. The student must select a faculty sponsor from the college's faculty and formulate the proposal in consultation with the sponsor. The program must be logically structured around a meaningful and interesting theme or topic, for example, adult services for persons with disabilities. Students desiring to build programs of this kind using a core of courses offered by other colleges should consult with those colleges. An example of such a program would be a contract major in early childhood facilities management, which might couple work in early childhood education and business. Students desiring programs involving a substantial amount of course work in colleges other than the College of Education will be required to secure a cosponsor from the discipline housing such course work.

The student who wishes to propose a B.S. contract major must

- have a cumulative GPA of at least 2.50.
- justify the new curriculum and define the goal to be achieved.
- design a multidisciplinary program that may be accommodated within existing university resources and facilities. The program may include internships, independent study, or special projects on or off campus, but no more than 12 semester hours of course work for these kinds of activities will be permitted in the contract.
- include in the program at least 50 semester hours of credit in courses basic to the area of study. These 50 semester hours
  - may not be used to fulfill general education requirements;
  - must include at least 35 semester hours of course work offered by the College of Education;
  - must include at least 30 semester hours of course work at the 300-400 level (of the 40 total upper-division hours required by the university);
  - must include at least 15 semester hours outside the department in which courses for the contract major are primarily offered;
  - must include a capstone experience; and
  - must complete 45 semester hours after the semester in which the program is approved.

A student's program of study must be approved by the student's faculty sponsor, the curriculum committee of the department in which the majority of course work is being taken, the associate dean of the college, and the College of Education Curriculum Committee.

A student who completes an approved contract major and all other graduation requirements will receive the degree Bachelor of Science with a contract major in _____ (the theme specified in the contract).

The college reserves the right to deny contract majors that overextend the resources of a department.

Requirements for the B.G.S. Degree

The College of Education offers students the opportunity of constructing individualized programs of study which are different from the university's regular major and minor programs. Such an individualized program of study, termed a contract major, utilizes

existing university courses and leads to the degree Bachelor of General Studies (B.G.S.). To receive the degree, a student must satisfy all university graduation requirements. The requirement of the contract major replaces the requirement of a regular departmental major. (See "Other Graduation Requirements.")

The B.G.S. contract major allows a student who has at least junior classification and unusual and well-defined academic interests to design a major with the advice of a faculty sponsor. The program must be logically structured around a meaningful and interesting theme or topic. Some topics which have been proposed are adult education, instructional development, paraprofessional counseling, and nontraditional education careers. Program proposals should be submitted to the associate dean of the College of Education and must be approved by the College Curriculum Committee.

The student who wishes to earn a degree through the general studies program must

have and maintain a cumulative GPA of at least 2.50.

justify the new curriculum and define the goal to be achieved.

design a multidisciplinary program, with the approval of a faculty sponsor, that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects on or off campus, up to a maximum of 12 semester hours.)

enroll in a capstone experience.

include in the program at least 50 semester hours of course work comprising courses basic to the area of interest. These 50 semester hours

- may not be used to fulfill general education requirements;
- must include at least 15 semester hours of course work offered by the College of Liberal Arts and Sciences;
- must include at least 30 semester hours in upper-division courses from the College of Education; and
- must not include more than 24 semester hours from the offerings of a single department in the College of Education, excluding the capstone experience.

A student who completes an approved contract major and all other graduation requirements will receive the degree Bachelor of General Studies with a contract major in _____ (the theme specified in the contract).

NOTE: The degree Bachelor of General Studies is not as well understood outside the university as traditional baccalaureate degrees. Students earning this degree may be required to convince prospective employers or graduate schools that the degree will enable them to succeed in a particular job or a future educational endeavor.

Certificate of Undergraduate Study

Professional Teaching Practices (15)

This certificate is designed for teacher certification students who wish to enhance their pedagogical knowledge, skill, and reflective practice. Study toward this certificate is open to any NIU teacher certification student with junior standing who has been admitted to and meets the retention standards of their certification program. With department approval, some or all of the requirements may be applied toward their undergraduate degree. All course requirements for the certificate must be completed at NIU within three calendar years. Teacher candidates must file a formal application with the associate dean of the College of Education at least one semester prior to graduation and must complete all certification requirements before the certificate is listed on the transcript.

Requirements

EPFE 400 - Foundations of Education (3),
OR EPFE 410 - Philosophy of Education (3)
EPS 304 - Development of the Elementary School Child (3),
OR EPS 405 - Issues in Human Development in the Elementary Through High School Years (3),
OR EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
ETR 430 - Tests and Measurements (Elementary) (3),
OR ETR 434 - Assessing Students with Special Needs (3),
OR ETR 440 - Secondary Classroom Assessment (3)
ETT 401A - Integrating Technology Into the Elementary Classroom (2), and ETT 401B - Field Experience for Integrating Technology Into the Elementary Classroom (1),
OR ETT 402 - Teaching and Learning with Technology (3),
OR ETT 429 - Computers in Classroom Teaching (3)
LTRE 300 - Elementary School Developmental Reading Programs (3),
OR LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3),
OR LTRE 310 - Teaching Reading in the Secondary School (3),
OR LTRE 311 - Content Area Literacy Instruction (3)

Dean's List Criteria

The College of Education recognizes undergraduates whose academic performance has been outstanding through the Dean's List. The Dean's List recognizes those students who achieve a GPA of 3.75 or higher (on a 4.00 scale) while completing a minimum of 12 graded semester hours within a fall or spring semester.

Reading Clinic Services

The university offers clinic services in reading to both elementary and secondary school students. Parents and school officials may avail themselves of this service by directing their correspondence to the director of the Reading Clinic.

One of the clinic's main purposes is to provide a greatly needed service, but it also plays an important role in the program of graduate students who wish to specialize in the teaching of reading or to become clinicians. Through the clinic, teachers are provided an opportunity to make diagnostic studies of children who have reading problems.

Interdisciplinary Courses Offered by the College of Education

UEDU 101. SKILLS FOR UNDERGRADUATE SUCCESS (1). Introduction to the baccalaureate experience and the College of Education. Development of appreciation for living in a diverse society and behaviors associated with being a professional educator; skills for critical thinking, decision-making, problem-solving; career exploration of programs offered through the college.

UEDU 300. CONTEMPORARY ISSUES IN EDUCATION (1). Concentrated studies in topics related to contemporary issues in education to provide an enhanced focus for the professional development of students interested in becoming teachers. Topics vary each semester. Open to residents of the TEACH floor only. May be repeated to a maximum of 6 semester hours. Students enrolled in UEDU 300 may not receive concurrent credit for UNIV 101 or UEDU 101.

Department of Counseling, Adult and Higher Education (CAHA, CAHC)

The Department of Counseling, Adult and Higher Education offers selected specialized courses developed to meet the needs of the university community.

All instructors will take roll during the first week of classes. A properly registered student has the legal right to a "seat" for a reasonable length of time, defined by the Department of Counseling, Adult and Higher Education as the first class meeting after the university add/drop date. Instructors reserve the right to drop administratively any student who has not attended class during this time period.

Course List

Adult and Higher Education (CAHA)

400. THE NATURE OF ADULT AND HIGHER EDUCATION (3). Historical, philosophical, and sociological bases of adult education with emphasis on present roles and future trends in the field. Designed for students studying in various departments and areas who wish to explore the field as it exists in basic education, high schools, community colleges, universities, private schools, businesses, governmental agencies, nonprofit organizations, and churches.

431X. TECHNIQUES OF TUTORING AND LEARNING ASSISTANCE (3). *Crosslisted as LTRE 431*. Methods and techniques for peer tutoring, supplemental instruction, learning assistance, or literacy tutoring. Development of tutorial resource materials. Basic assessment and remedial or developmental processes in content area tutoring, study strategies, and learning assistance. Experiences with tutorial programs, learning assistance programs, or supplemental instruction groups.

490. WORKSHOP IN ADULT CONTINUING EDUCATION (1 to 3). Opportunity provided to work cooperatively under the guidance and supervision of an experienced adult educator. Intensive analysis of specific programs of adult education. Literature of the field and techniques of studying agency problems. Special projects assigned to each student for intensive study. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

492. SPECIAL TOPICS IN ADULT CONTINUING EDUCATION (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Counseling (CAHC)

211. CAREER PLANNING (3). Presentation of career development and career decision making as lifelong processes. Discussion of the relationship of individuals to their work. Practice in decision making and application of learned skills to personal, academic, and career planning. Not open to students with credit in ACCY 370, FINA 395, MGMT 395, MKTG 395, or OMIS 300.

400. EXPLORATION IN THE COUNSELING PROFESSION (3). Training in facilitative communication skills and attention to one's relationship with the helping occupations in the community.

410. FOUNDATIONS OF CAREER EDUCATION (3). Concepts, evaluation, overview, and programs in career education.

490. WORKSHOP IN COUNSELING (1 to 3). Contemporary issues and problems in the provision of human services. May be repeated to a maximum of 6 semester hours when subject varies.

497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.PRQ: Consent of department.

Counseling, Adult and Higher Education Faculty

Lemuel W. Watson, Ed.D., Indiana University, professor, chair
Lisa Baumgartner, Ed.D., University of Georgia, associate professor
Phyllis M. Cunningham, Ph.D., University of Chicago, Distinguished Teaching Professor, emeritus
Teresa A. Fisher, Ph.D., University of Illinois, associate professor
Francesca Giordano, Ph.D., University of Virginia, associate professor
LaVerne Gyant, Ed.D., Pennsylvania State University, associate professor
Brian Hemphill, Ph.D., University of Iowa, assistant professor
Sharon Holmes, Ph.D., Iowa State University, associate professor
Jorge Jeria, Ph.D., Iowa State University, professor
Laurel Jeris, Ed.D., Northern Illinois University, associate professor
Margaret MBilizi, Ph.D., Indiana University, assistant professor
Carole W. Minor, Ph.D., University of Maryland, Distinguished Teaching Professor
William R. Molasso, Ph.D., Michigan State University, assistant professor
Richard A. Orem, Ed.D., University of Georgia, professor
Allen J. Ottens, Ph.D., University of Illinois, professor
Amy D. Rose, Ed.D., Columbia University Teachers College, professor
Gene L. Roth, Ph.D., Southern Illinois University, Distinguished Teaching Professor
Christine K. Sorensen, Ph.D., Iowa State University, associate professor
Toni R. Tollerud, Ph.D., University of Iowa, professor
Scott A. Wickman, Ph.D., Southern Illinois University, assistant professor
Leann Wyrick-Morgan, Ph.D., University of Northern Colorado, assistant professor
Wei Zheng, Ph.D., University of Minnesota, assistant professor

Department of Educational Technology, Research and Assesment (ETR, ETT)

The Department of Educational Technology, Research and Assessment offers undergraduate courses to develop core knowledge and competence in research, assessment, and instructional technology. These courses support College of Education programs as well as programs in other disciplines.

Course List

Instructional Technology (ETT)

229. COMPUTERS IN EDUCATION (3). Fundamental operations and concepts of computer technologies to facilitate learning in today's P-12 classrooms. No previous experience with computers required. Designed for students entering the education profession.

397. INDIVIDALIZED COMPETENCY UNIT IN INSTRUCTIONAL TECHNOLOGY (1 to 3). Successful demonstration by the student of selected instructional technology competencies, typically resulting in a lesson plan and accompanying mediated materials, and measured by a summative evaluation. May be repeated to a maximum of 6 semester hours.

401A. INTEGRATING TECHNOLOGY INTO THE ELEMENTARY CLASSROOM (2). Advanced skills and topics in learning technologies for the pre-service elementary teacher. Explore, plan, and practice using productivity, multimedia, and telecommunications tools to support student learning. Examine related social, ethical, legal, and human issues. PRQ: Elementary education major and ETT 229 or pass ETT proficiency examination.

401B. FIELD EXPERIENCE FOR INTEGRATING TECHNOLOGY INTO THE ELEMENTARY CLASSROOM (1). Gain practice with and reflect upon the use of productivity, multimedia, and telecommunications tools to support student learning. PRQ: Elementary education major and ETT 401A. CRQ: TLEE 460.

402. TEACHING AND LEARNING WITH TECHNOLOGY (3). Practice using audio and visual, computer, and telecommunications technologies as tools to support and enhance learning. Design technology-based learning experiences. Social, ethical, legal, and human issues of planning and implementing technology programs. Not open to elementary education majors. PRQ: ETT 229 or pass ETT proficiency examination.

429. COMPUTERS IN CLASSROOM TEACHING (3). Survey of educational uses of computers. Emphasis on the role of computers in the educational environment, hardware, review and evaluation of available educational software, software applications, and technology implementation. No previous experience with computers required. Designed for students entering an educational environment. Not open to students with previous experience in data processing or information systems without permission of their major department.

430. SURVEY OF INSTRUCTIONAL TECHNOLOGY (3). Overview of media and technology in education; introduction to the field of instructional technology. Issues of integration of technology and learning including selection, production, utilization, and evaluation of a wide variety of instructional media and technology.

439. DEVELOPING EDUCATIONAL SOFTWARE FOR COMPUTERS (3). Design and develop educational software for computers. Experience with design methodologies for educational software and authoring systems commonly used in education. PRQ: ETT 429 or consent of department.

450. INSTRUCTIONAL VIDEO I (3). *Crosslisted as COMS 450X.* Practical methods for the production and use of video in educational settings. Preparation and presentation of televised instructional materials. Not open to students with credit in COMS 357 or COMS 358 or equivalent.

455. MEDIA DESIGN TECHNIQUES (3). Designing presentations for instruction. Emphasis on basic design, writing, and photographic techniques. PRQ: ETT 430, or ETT 401A and ETT 401B, or ETT 402.

490. WORKSHOP IN INSTRUCTIONAL TECHNOLOGY (1 to 3). Concentrated study of applications, issues, or problems related to the current or future roles of instructional technologists in the community and/or public schools. May be repeated to a maximum of 6 semester hours when subject varies.

492. SPECIAL TOPICS IN INSTRUCTIONAL TECHNOLOGY (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Research and Assessment (ETR)

430. TESTS AND MEASUREMENTS (ELEMENTARY) (3). Devices and techniques available to the elementary teacher for measuring and evaluating pupil growth and learning for guiding children in realizing their individual potentials in a multicultural setting. Students taking this course are not eligible to take ETR 440. PRQ: Cumulative GPA of 2.75 or higher. Limited to elementary education majors.

434. ASSESSING STUDENTS WITH SPECIAL NEEDS (3). Nondiscriminatory assessment procedures for identifying and enhancing educational outcomes for students with special needs. PRQ: TLSE 240 or consent of department.

440. SECONDARY CLASSROOM ASSESSMENT (3). Constructing, administering, and scoring assessment activities and interpreting classroom assessment and standardized tests results. Consideration given to cultural factors in educational measurement. Designed to be taken by students seeking initial teacher certification. PRQ: Minimum 2.50 GPA. Students taking this course are not eligible to take ETR 430. Limited to secondary education majors.

492. SPECIAL TOPICS IN RESEARCH AND ASSESSMENT (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT RESEARCH IN RESEARCH AND ASSESSMENT (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Educational Technology, Research and Assessment Faculty

Jeffrey B. Hecht, Ph.D., University of California, Riverside, professor, chair
Rebecca P. Butler, Ph.D., University of Wisconsin, associate professor
Cynthia S. Campbell, Ph.D., Southern Illinois University, associate professor
Vicki L. Collins, Ph.D., University of Oregon, assistant professor
Corenna C. Cummings, Ph.D., University of Pittsburgh, associate professor
Barbara A. Fiehn, Ed.D., St. Cloud State University, assistant professor
Janet K. Holt, Ph.D., Southern Illinois University, associate professor

Pi Sui Hsu, Ph.D., Pennsylvania State University, assistant professor
Wei-Chen Hung, Ph.D., Indiana University, assistant professor
Paul J. Ilsley, Ed.D., Northern Illinois University, professor
James A. Lockard, Ph.D. Iowa State University, Distinguished Teaching Professor
Lara M. Luetkehans, Ph.D., University of Georgia, associate professor
Hayley J. Mayall, Ph.D., University of Connecticut, assistant professor
Rhonda S. Robinson, Ph.D., University of Wisconsin, Distinguished Teaching Professor
Kenneth Silber, Ph.D., University of Southern California, associate professor
Sharon E. Smaldino, Ph.D., Southern Illinois University, professor
Thomas J. Smith, Ph.D., University of Illinois, associate professor
David A. Walker, Ph.D., Iowa State University, associate professor
Brent E. Wholeben, Ph.D., University of Wisconsin, professor
Lisa Yamagata-Lynch, Ph.D., Indiana University, assistant professor

Department of Kinesiology and Physical Education (KNDN, KNPE, LESM)

Admission to the emphasis in athletic training under the B.S. in kinesiology is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Kinesiology and Physical Education offers a B.S. in kinesiology and a B.S.Ed. in physical education. The department also offers minors in dance education, kinesiology and physical education (with an interdisciplinary option), coaching, and sports medicine. In addition, the department offers selected courses developed to meet the needs of the university community.

The B.S.Ed. program in physical education is designed for students who plan to teach physical education at the elementary, intermediate, or secondary level. The K-12 certification program meets requirements for teaching physical education at all levels. The 6-12 certification program meets requirements for secondary certification. Those who receive 6-12 certification may also teach in a second field upon successful completion of necessary course work. KNPE 200 should be taken during the first semester of enrollment. Students completing the 6-12 certification program in physical education are encouraged to seek middle grades endorsement. Additional course work may be necessary.

The B.S. program in kinesiology is designed for students preparing for professional opportunities outside the area of certified teaching (i.e., athletic training and preventive and rehabilitative science).

The Department of Kinesiology and Physical Education recommends high school preparation in biology, geometry, chemistry, and physics for students who plan to major or minor in any area of physical education. Such students should seek early academic advisement through the office of the coordinator of advisement.

All instructors will take roll during the first week of classes. A properly registered student has the legal right to a "seat" for a reasonable length of time, defined by the Department of Kinesiology and Physical Education as the first class meeting after the university add/drop date. Instructors reserve the right to drop administratively any student who has not attended class during this time period.

Major in Physical Education (B.S.Ed.)

Students must take KNPE 225, Fundamental Sport Skills I, during the first 15 semester hours of their program. KNPE 226, Fundamental Sport Skills II, and KNPE 335, Developmental Skill-Based Approach to Teaching, must be taken within the first 30 semester hours of their program.

All students seeking certification to teach physical education must compile a teaching portfolio before seeking permission to student teach. Students are urged to take KNPE 200, Introduction to Teaching Physical Education, during their first semester in order to begin the portfolio.

Intermediate-level swimming skills are required for completion of this degree. Students may fulfill the requirement with KNPE 170, with proficiency, or by holding current YMCA or American Red Cross certification. Students are strongly urged to gain water safety instructor certification (KNPE 231).

All students seeking admission to teacher education are required to have an overall minimum GPA of 2.75, a grade of C or better in all general education core courses, and pass the ICTS Basic Skills Test. These requirements must be met prior to admission to KNPE 343. Admission to KNPE 343 constitutes admission to teacher education in physical education. Students must obtain a minimum grade of C and a 3.00 GPA or higher in the following courses for retention in teacher education: KNPE 343, KNPE 365/366, KNPE 367/368, and KNPE 490. Students are encouraged to maintain close contact with their advisers as the teacher preparation program in physical education is tightly sequenced.

Emphasis 1. General Physical Education/6-12 Teacher Certification

Requirements in Department (66-67)

KNDN 216 - Modern Dance (½)
KNDN 220 - Recreational Dance Forms (2)
KNDN 264 - Jazz Dance (½),
  OR KNDN 265 - Tap Dance (½)
KNDN 351 - Multicultural Dance (1)
KNPE 200 - Introduction to Teaching Physical Education (2)
KNPE 209 - Tumbling (½)
KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 225 - Fundamental Sport Skills I (2)
KNPE 226 - Fundamental Sport Skills II (2)
KNPE 227 - Rhythmic and Cooperative Gymnastics (½)
KNPE 240 - Aquatic Fitness (1),
  OR KNPE 241 - Aerobic Fitness (1),
  OR KNPE 242 - Techniques of Resistance Training (1)
KNPE 262 - First Aid and CPR (2)
KNPE 310 - Psychological Aspects of Sport and Exercise (3)
KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
KNPE 336 - Fitness Education (1)
KNPE 340 - Growth and Motor Development (3)
KNPE 343 - Elementary School Physical Education/ Methods and Field Experience (3)
KNPE 344 - Field Experience in the Elementary School (1)
KNPE 365 - Introduction to Adventure Education (3),
  OR KNPE 366 - Lifetime Sports and Activities (3)
KNPE 367 - Tactical Approach to Teaching Games (3),
  OR KNPE 368 - Sport Education (3)
One course from each of the following pairs, including at least one 4-hour course (7-8)
  KNPE 313 - Mechanical Kinesiology of Motor Skills (3),
    OR KNPE 314 - Applied Kinesiology (4)
  KNPE 451 - Physiology of Exercise (3),
    OR KNPE 452 - Applied Physiology of Exercise (4)
KNPE 421 - Curriculum Designs in Middle and High School Physical Education (2)
KNPE 446 - Measurement and Evaluation in Physical Education School Settings (3)
KNPE 466 - Field Experience at Outdoor Environments (1)
KNPE 467 - Field Experience in the Middle School (1)
KNPE 468 - Field Experience in the High School (1)
KNPE 484 - Middle School Student Teaching in Physical Education (6)
KNPE 485 - Secondary School Student Teaching in Physical Education (6)
KNPE 490 - Adapted Physical Education (3)
KNPE 492 - Special Physical Education Clinic Practicum (1)

Requirements outside Department (13-14)

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
EPFE 400 - Foundations of Education (3),
OR EPFE 321 - History of American Education (3),
OR EPFE 410 - Philosophy of Education (3)
EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
LTRE 310 - Teaching Reading in the Secondary School (3),
OR LTRE 311 - Content Area Literacy Instruction (3)
Fulfillment of requirements for teacher certification (See program director.)

Total Hours for Emphasis 1, General Physical Education/6-12 Teacher Certification: 81-83

Recommendation

Students are encouraged to select from the following in order to become a more fully prepared teacher.

KNDN 474 - History of Dance: Primitive Through Renaissance (3)
KNPE 393 - Social Aspects of Sport (3)
KNPE 440 - Organization and Administration of Physical Education and Athletics (3)
KNPE 480 - Principles and Problems of Coaching (3)
KNPE 486 - Principles of Motor Learning and Performance (3)

Emphasis 2. General Physical Education/K-12 and 6-12 Teacher Certification

Requirements in Department (68.5-69.5)

KNDN 216 - Modern Dance (½)
KNDN 220 - Recreational Dance Forms (2)
KNDN 351 - Multicultural Dance (1)
KNPE 200 - Introduction to Teaching Physical Education (2)
KNPE 209 - Tumbling (½)
KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 225 - Fundamental Sport Skills I (2)
KNPE 226 - Fundamental Sport Skills II (2)
KNPE 227 - Rhythmic and Cooperative Gymnastics (½)
KNPE 240 - Aquatic Fitness (1),
OR KNPE 241 - Aerobic Fitness (1),
OR KNPE 242 - Techniques of Resistance Training (1)
KNPE 262 - First Aid and CPR (2)
KNPE 310 - Psychological Aspects of Sport and Exercise (3)
KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
KNPE 336 - Fitness Education (1)
KNPE 340 - Growth and Motor Development (3)
KNPE 343 - Elementary School Physical Education/ Methods and Field Experience (3)
KNPE 344 - Field Experience in the Elementary School (1)
KNPE 348 - Educational Dance for Children (2)
KNPE 365 - Introduction to Adventure Education (3),
OR KNPE 366 - Lifetime Sports and Activities (3)
KNPE 367 - Tactical Approach to Teaching Games (3),
OR KNPE 368 - Sport Education (3)
One course from each of the following pairs, including at least one 4-hour course (7-8)
KNPE 313 - Mechanical Kinesiology of Motor Skills (3),
OR KNPE 314 - Applied Kinesiology (4)
KNPE 451 - Physiology of Exercise (3),
OR KNPE 452 - Applied Physiology of Exercise (4)
KNPE 421 - Curriculum Designs in Middle and High School Physical Education (2)
KNPE 422 - Motor Development Laboratory (1)
KNPE 446 - Measurement and Evaluation in Physical Education School Settings (3)
KNPE 466 - Field Experience at Outdoor Environments (1)
KNPE 467 - Field Experience in the Middle School (1)
KNPE 468 - Field Experience in the High School (1)
KNPE 483 - Elementary School Student Teaching in Physical Education (6)
KNPE 484 - Middle School Student Teaching in Physical Education (6),
OR KNPE 485 - Secondary School Student Teaching in Physical Education (6)
KNPE 490 - Adapted Physical Education (3)
KNPE 492 - Special Physical Education Clinic Practicum (1)

Requirements outside Department (13-14)

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
EPFE 400 - Foundations of Education (3),
OR EPFE 321 - History of American Education (3),
OR EPFE 410 - Philosophy of Education (3)
EPS 405 - Issues in Human Development in the Elementary Through High School Years (3)
LTRE 310 - Teaching Reading in the Secondary School (3),
OR LTRE 311 - Content Area Literacy Instruction (3)
Fulfillment of requirements for teacher certification (See program director.)

Total Hours for Emphasis 2, General Physical Education/K-12 and 6-12 Teacher Certification: 82-84

Recommendation

Students are encouraged to select from the following in order to become a more fully prepared teacher.

KNDN 474 - History of Dance: Primitive Through Renaissance (3)
KNPE 393 - Social Aspects of Sport (3)
KNPE 440 - Organization and Administration of Physical Education and Athletics (3)
KNPE 480 - Principles and Problems of Coaching (3)
KNPE 486 - Principles of Motor Learning and Performance (3)

Major in Kinesiology (B.S.)

All students pursuing the B.S. degree with a major in kinesiology must choose the emphasis in athletic training or the emphasis in preventive and rehabilitative exercise science and are required to have a university GPA of at least 2.15, a 2.50 GPA or above for all required courses in the major, and to have satisfactorily completed all required course work prior to the culminating internship, KNPE 494. Students must complete ENGL 104 or ENGL 105 (or pass the English Core Competency Examination II) and one of the university mathematics core competency courses other than MATH 201 with grades of C or better prior to enrollment in certain departmental required courses. Students cannot take any required courses for the major in or outside the department on a pass/fail basis.

Requirements in Department (30)

KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 240 - Aquatic Fitness (1)
KNPE 241 - Aerobic Fitness (1)
KNPE 242 - Techniques of Resistance Training (1)
KNPE 243 - Program Development of Resistance Training (1)
KNPE 262 - First Aid and CPR (2)
KNPE 310 - Psychological Aspects of Sport and Exercise (3)
KNPE 314 - Applied Kinesiology (4)
KNPE 445 - Measurement and Evaluation in Exercise Science (3)
KNPE 452 - Applied Physiology of Exercise (4)
KNPE 491 - Therapeutic Exercise (3)
KNPE 494 - Internship in Kinesiology (6)

Requirements outside Department (19-20)

*BIOS 104 - General Biology (4)
*CHEM 110 - Chemistry (3)
*ENGL 104 - Rhetoric and Composition II (3),
OR *ENGL 105 - Rhetoric and Composition (3), if placed in ENGL 105,
OR pass the English Core Competency II Examination (0)

* Available for general education credit.

FCNS 306 - Nutrition in Relation to Health and Exercise (3),
OR FCNS 306 Nutrition in Relation to Health and Exercise (2), and KNPE 306 - Sports Nutrition (1)
PSYC 102 - Introduction to Psychology (3)
OR PSYC 219 - Mental Hygiene (3)

One of the following (3-4)
*MATH 101 - Core Competency in Mathematics (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 206 - Introductory Discrete Mathematics (3)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
*MATH 229 - Calculus I (4)

Emphasis 1. Athletic Training (50-51)

The emphasis in athletic training reflects the requirements of the Commission on the Accreditation of Allied Health Education Programs (CAAHEP), and students who want to sit for the National Athletic Trainers' Association Board of Certification (NATABOC) examination must complete this emphasis. Current policies and procedures regarding eligibility for the NATABOC examination are available in the department's advising office.

Admission to the emphasis in athletic training is competitive and limited. University admission does not necessarily constitute eligibility for admission into this area of study. Admission policies are described in the "Limited Admissions and Limited Retention Requirements" section of this catalog.

Retention in the program requires a 2.50 GPA in the major. Students enrolled in the athletic training emphasis may be dismissed from the program for academic reasons or for unprofessional behavior or actions that threaten the health and safety of others. It is the responsibility of students to secure a copy of the Athletic Training Student Handbook which describes the policies of the program. Students are required to adhere to all current policies and procedures.

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
AHP 206 - Contemporary Health Concepts (3)
KNPE 202 - Introduction to Athletic Training (1)
KNPE 264 - Principles of Injury Prevention and Care (3)
KNPE 265 - Practicum in Athletic Training (3)
KNPE 322 - Clinical Proficiencies in Athletic Training: Lower-Extremity Assessment (2)
KNPE 323 - Clinical Proficiencies in Athletic Training: Upper-Extremity Assessment (2)
KNPE 324 - Assessment of Lower-Extremity Injury (3)
KNPE 325 - Assessment of Upper-Extremity Injury (3)
KNPE 326 - Therapeutic Modalities and Treatment of Athletic Injuries (3)
KNPE 331 - Clinical Experience in Athletic Training I (3)
KNPE 332 - Clinical Experience in Athletic Training II (3)
KNPE 427 - Clinical Proficiencies in Athletic Training: Therapeutic Modalities and Exercise (2)
KNPE 433 - Effective Communication and Case Management Skills in Athletic Training (2)
KNPE 434 - Clinical Experience in Athletic Training III (3)
KNPE 435 - Clinical Experience in Athletic Training IV (3)
KNPE 453 - Exercise Programs for Adult Special Populations (3), and KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (1),
OR KNPE 490 - Adapted Physical Education (3), and KNPE 492 - Special Physical Education Clinic Practicum (1)
KNPE 474 - Medical Issues in Athletic Training (3)

Total Hours for Emphasis 1, Athletic Training: 99-101

Emphasis 2. Preventive and Rehabilitative Exercise Science (43-44)

One of the following (3)
AHLS 211 - Introduction to the Clinical Laboratory Sciences (3)
*AHP 295 - Ecology of Health (3)
AHP 318 - Medical Terminology (3)
AHPH 445 - Public Health Promotion (3)
AHPH 460 - Principles of the Organization of Public Health and Health Care Programs (3)
AHPH 488 - Applied Health Promotion Programming (3)
AHPT 417 - Pathology and Pharmacology for Physical Therapists (3)
BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
One of the following (3)
COMS 203 - Interpersonal Communication Skills (3)
ENGL 207 - Fundamentals of English Grammar (3)
ENGL 250 - Practical Writing (3)
ENGL 300A - Advanced Essay Composition (3)
ENGL 308 - Technical Writing (3)
ETT 429 - Computers in Classroom Teaching (3)
Select from the following (2)
KNPE 106 - Yoga (1)
KNPE 109 - Jogging (1)
KNPE 122 - Racquetball (1)
KNPE 177 - Swimming Conditioning (2)
KNPE 188 - Marathon Training (2)
KNPE 197 - Bicycling (1)
KNPE 213 - Basketball (½)
KNPE 223 - Tennis (½)
KNPE 230 - Lifeguard Training (2)
KNPE 231 - Water Safety Instructor (2)
KNPE 201 - Introduction to Exercise Science and Sport Professions (3)
KNPE 317 - Stress Management Programming for Fitness Leaders (3)
KNPE 453 - Exercise Programs for Adult Special Populations (3)
KNPE 454 - Exercise Gerontology (3)
KNPE 457 - Analysis and Techniques of Training and Conditioning (3)
KNPE 458 - Stress Testing (3)
KNPE 459 - Physical Fitness Programming (3)
KNPE 460 - Cardiopulmonary Disease and Rehabilitation (3)
KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (1)
SOCI 251 - Health, Aging, and Society (3),
OR SOCI 462 - Aging and Society (3),
OR SOCI 482 - Sociology of Death and Dying (3)
One of the following (3)
AHP 201 - Social and Individual Patterns of Drug Use (3)
AHPH 307 - Drug Use and Abuse (3)
AHPH 409 - Drug Education (3)
AHPH 410 - Death Education (3)
AHPH 491 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
AHPH 492 - Behavioral and Social Aspects of Public Health (3)

Total Hours for Emphasis 2, Preventive and Rehabilitative Exercise Science: 93-95

Minor in Kinesiology and Physical Education

Option 1. Physical Education (30½-33½)

This option is designed for the certified teacher who selects physical education as a second teaching field or students seeking endorsement in physical education 6-12.

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
KNDN 351 - Multicultural Dance (1),
OR KNDN 220 - Recreational Dance Forms (2)
KNPE 209 - Tumbling (½)
KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 225 - Fundamental Sport Skills I (2)

* Available for general education credit.

KNPE 226 - Fundamental Sport Skills II (2)
KNPE 313 - Mechanical Kinesiology of Motor Skills (3),
OR KNPE 314 - Applied Kinesiology (4)
KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
KNPE 336 - Fitness Education (1)
KNPE 421 - Curriculum Designs in Middle and High School Physical Education (2)
KNPE 446 - Measurement and Evaluation in Physical Education School Settings (3)
KNPE 452 - Applied Physiology of Exercise (4)
KNPE 492 - Special Physical Education Clinic Practicum (1)
One of the following (3)
KNPE 365 - Introduction to Adventure Education (3)
KNPE 367 - Tactical Approach to Teaching Games (3)
KNPE 368 - Sport Education (3)

Option 2. Interdisciplinary (20-22)

A non-certification option designed for individualized programming. Subject to departmental approval.

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 393 - Social Aspects of Sport (3)
Select from the following (3)
KNPE 240 - Aquatic Fitness (1)
KNPE 241 - Aerobic Fitness (1)
KNPE 242 - Techniques of Resistance Training (1)
KNPE 243 - Program Development of Resistance Training (1)
One of the following (3-4)
KNPE 313 - Mechanical Kinesiology of Motor Skills (3)
KNPE 314 - Applied Kinesiology (4)
KNPE 452 - Applied Physiology of Exercise (4)
Other course work with advice and consent of departmental adviser (6)

Minor in Coaching (27-29)

This minor meets the requirements for Illinois coaching certification when other requirements are met (19 years of age and have a baccalaureate degree). Students pursuing a coaching minor are not required to hold teacher certification. Physical education majors may declare the minor in coaching.

BIOS 311 - Functional Human Anatomy (4),
OR BIOS 357 - Human Anatomy and Physiology (5)
KNPE 217 - Personal Health-Related Fitness Development (1)
KNPE 242 - Techniques of Resistance Training (1)
KNPE 243 - Program Development of Resistance Training (1)
KNPE 262 - First Aid and CPR (2)
KNPE 310 - Psychological Aspects of Sport and Exercise (3)
KNPE 313 - Mechanical Kinesiology of Motor Skills (3),
OR KNPE 314 - Applied Kinesiology (4)
KNPE 440 - Organization and Administration of Physical Education and Athletics (3)
KNPE 452 - Applied Physiology of Exercise (4)
KNPE 457 - Analysis and Techniques of Training and Conditioning (3)
One of the following (2)
KNPE 374 - Coaching Fast-Pitch Softball (2)
KNPE 375 - Theory and Practice of Coaching Baseball/Softball (2)
KNPE 376 - Theory and Practice of Coaching Basketball (2)
KNPE 378 - Theory and Practice of Coaching Football (2)
KNPE 379 - Theory and Practice of Coaching Golf (2)
KNPE 381 - Theory and Practice of Coaching Soccer (2)
KNPE 383 - Theory and Practice of Coaching Competitive Swimming (2)
KNPE 384 - Theory and Practice of Coaching Track and Field (2)
KNPE 385 - Theory and Practice of Coaching Volleyball (2)

Minor in Dance Education (26-32½)

This minor provides theoretical knowledge and technical skills in all dance forms applicable to educational and professional dance. The curriculum is based on scientific and artistic foundations. Each student must plan an individualized program of study in cooperation with a departmental adviser. Students majoring in the department are permitted to declare this minor. A student interested in an endorsement in dance education should consult an adviser.

KNDN 264 - Jazz Dance (½)
KNDN 265 - Tap Dance (½)
KNDN 353 - Analysis and Pedagogy of Dance (3)
KNDN 367 - Dance Performance in Education (1)
KNDN 467 - Curricula and Programs for Dance (2)
KNDN 475 - History of Dance: 18th Century to Modern Times (3)
Course work from the following by audition (10)
TH-D 205 - Dance Techniques I (1-2)
TH-D 207 - Dance Techniques II (1-2)
TH-D 305 - Ballet III (1-2)
TH-D 306 - Modern Dance III (1-2)
TH-D 405 - Ballet IV (1-2)
TH-D 406 - Modern Dance IV (1-2)
Select option 1 for studio dance or option 2 for school dance teaching (6 or 12½)

Option 1 (6)

Course work from the following not used above (2)
TH-D 205 - Dance Techniques I (1-2)
TH-D 207 - Dance Techniques II (1-2)
TH-D 305 - Ballet III (1-2)
TH-D 306 - Modern Dance III (1-2)
TH-D 405 - Ballet IV (1-2)
TH-D 406 - Modern Dance IV (1-2)
Course work from the following (4)
KNDN 366 - Dance Production (2)
KNDN 369 - African Heritage Dance (2)
TH-D 286 - Rhythmic Analysis, Improvisation, and Composition (3)
TH-D 330 - Theatre Dance (2)
TH-D 361 - Jazz Technique (2)
TH-D 388 - Choreography I (2)
TH-D 467 - Dance Notation I (3)
TH-D 477 - Special Studies in Dance (2)

Option 2 (13)

Course work from the following
KNDN 220 - Recreational Dance Forms (2)
KNDN 355 - Fitness and Conditioning for Dancers (2)
KNDN 356 - Practicum in Dance (1)
KNDN 366 - Dance Production (2)
KNDN 369 - African Heritage Dance (2)
KNDN 473 - Dance as Art in Education (3)
KNPE 348 - Educational Dance for Children (2)
TH-D 388 - Choreography I (2)

Course List

With the exception of KNPE 100 and KNPE 111, all 100-level KNPE and KNDN courses may be repeated for credit one time only.

Dance Education (KNDN)

KNDN 152. AMERICAN SQUARE AND ROUND DANCE I (1). Fundamental skills and a variety of square and round dances applicable for use in school and recreational programs.

KNDN 154. BALLET I (2). Knowledge and beginning techniques of ballet.

KNDN 155. BALLET II (2). Continuation of the development of performance, knowledge, and appreciation of classical ballet.

KNDN 156. INTERNATIONAL FOLK DANCE I (2). Folk dances of many countries applicable to use in school and recreational programs.

KNDN 158. MODERN DANCE I (2). Modern dance techniques and creative exploration of the elements of time, space, and force.

KNDN 159. MODERN DANCE II (2). Continuation of KNDN 158, with emphasis on more advanced techniques, skills, and compositions.

KNDN 160. JAZZ DANCE I (2). Basic techniques of jazz dance. Includes a variety of early jazz styles

KNDN 161. JAZZ DANCE II (2). Intermediate jazz technique with emphasis on current trends.

KNDN 162. SOCIAL DANCE I (1). Basic elements and creative routines for foxtrot, waltz, swing, discotheque, and various South American dances.

KNDN 164. TAP TECHNIQUES I (2). Introduction to elementary sounds and steps.

KNDN 165. TAP TECHNIQUES II (2). Study and development of buck and rhythm forms of tap dance. A student enrolling in this class should be able to demonstrate proficiency in the basic tap dance.

KNDN 166. AEROBIC DANCE (2). Concepts and application of aerobic dance exercises to improve flexibility, cardiovascular endurance, muscular strength, muscular endurance, and body composition.

KNDN 167. "ORCHESIS" PERFORMANCE (1). Refinement of dance skill and practical application of production, choreography, and performance as related to dance.

KNDN 214. FOLK AND SQUARE DANCE (1). Skills and knowledge in international and American folk dance. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNDN 216. MODERN DANCE (½). Skills and knowledge for creative exploration in modern dance. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNDN 220. RECREATIONAL DANCE FORMS (2). Analysis of movement for folk, square, contra, and social/line dance. Promotes and develops the skill of the above dance forms. PRQ: Physical education major or minor.

KNDN 222. SOCIAL DANCE (½). Contemporary social dance forms. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNDN 264. JAZZ DANCE (½). Introduction to the basic concepts of jazz movement and history of jazz. Emphasis on the development of jazz movement patterns. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNDN 265. TAP DANCE (½). Introduction to the basic concepts of tap movement and history of tap. Emphasis on the development of tap movement patterns.

KNDN 351. MULTICULTURAL DANCE (1). Analysis of movements and teaching strategies for multicultural dance. Promotes understanding of our global society. PRQ: Physical education major or minor.

KNDN 353. ANALYSIS AND PEDAGOGY OF DANCE (3). *Crosslisted as TH-D 353X.* Application of pedagogical knowledge and skills for teaching dance in a school and/or community setting. Analysis of movement utilizing principles of movement and applied kinesiology.

KNDN 355. FITNESS AND CONDITIONING FOR DANCERS (2). *Crosslisted as TH-D 355X*. Analysis and techniques that promote fitness and conditioning for dancers. Emphasis on dance classes that apply to physiological, kinesiological, and movement principles, prevention of injuries, weight control, and nutrition.

KNDN 356. PRACTICUM IN DANCE (1). Opportunity for student dancers to observe, interact with, and teach children K-12. CRQ: KNDN 353.

KNDN 365. ACCOMPANIMENT FOR DANCE (2). Development of basic concepts of the elements of music and dance through analysis, composition, technique, improvisation, and performance.

KNDN 366. DANCE PRODUCTION (2). Various types of dance production in education. Instruction in technical skills, organization, and problems involved in transforming choreographic ideas into a dance production. Coordination of design, stage setting, lighting, costuming, and accompaniment into a finished product for a variety of educational experiences.

KNDN 367. DANCE PERFORMANCE IN EDUCATION (1). Participation in a dance performance: concerts or works in progress. Emphasis on dancing, creating, and producing. PRQ: Consent of department.

KNDN 369. AFRICAN HERITAGE DANCE (2). Exploration of the history of African-American dance in the U.S. Survey of contributions to dance by African-Americans in social dance, modern dance, contemporary dance, and classical ballet. Study of dance techniques originating from African heritage.

KNDN 467. CURRICULA AND PROGRAMS FOR DANCE (2). Educational, recreational, and therapeutic curricula and programs in dance. Selection and development of appropriate dance experiences for all age groups. Principles and problems of dance programs in schools, studios, fitness/recreational centers, nursing homes, hospitals, and mental health facilities. PRQ: KNDN 353.

KNDN 473. DANCE AS ART IN EDUCATION (3). Development of aesthetic and cultural theories of dance as an art form in education. Opportunity for practical application of the elements of dance and related art forms in education to the elementary, secondary, or higher education levels and/or to students of various intellectual and physical abilities.

KNDN 474. HISTORY OF DANCE: PRIMITIVE THROUGH RENAISSANCE (3). Historical development of dance from primitive to the renaissance period through the world focusing on cultural and religious trends.

KNDN 475. HISTORY OF DANCE: 18TH CENTURY TO MODERN TIMES (3). Historical development of dance from the 18th century to modern times, considering cultural and artistic implications.

Physical Education (KNPE)[1]

KNPE 100. SCIENTIFIC BASIS OF HUMAN ACTIVITY (3). Aspects of physical activity–biological, mechanical, physiological, nutritional, and psychological–with laboratory experiences to further students' understanding of these areas.

#KNPE 101. PRACTICUM IN PHYSICAL EDUCATION(1 to 2). Experimental courses designed to meet current needs of students. Activities may change each semester.

KNPE 102. PHYSICAL FITNESS (2). Concepts and application of exercise and nutrition toward health-related fitness: body composition, cardiovascular endurance, flexibility, muscular strength, and endurance.

KNPE 104. WEIGHT TRAINING AND CONDITIONING (1). Fundamental skills and techniques of weight training.

KNPE 105. ADVANCED WEIGHT TRAINING (2). Advanced skills and techniques of weight training. PRQ: KNPE 104.

KNPE 106. YOGA (1). Elementary and intermediate yoga postures and exercises.

KNPE 109. JOGGING (1). Techniques, principles, and practice in jogging.

KNPE 110. RELAXATION (1). Concepts and application of self-controlled muscular relaxation with emphasis on freedom from stress and anxiety.

KNPE 111. SPORT: CULTURE AND SOCIETY (3). Examination of interaction between sport and culture; impact of sport on United States society; and social processes which influence sport.

KNPE 112. ARCHERY I (1). Fundamental skills and techniques of archery.

[1] Courses marked with the symbol # involve risk or safety factors. The department reserves the right to deny admission to or contiuation of emrollment in these courses to any student who is deemed a risk factor to others or to himself or herself.

KNPE 113. BADMINTON I (1). Introduction to basic badminton skills and game play.

KNPE 114. BADMINTON II (1). Continuation of the knowledges and skills of badminton with consideration of relevant kinesiological and physiological factors. PRQ: KNPE 113.

KNPE 117. BOWLING I (1). Fundamental skills and techniques of bowling.

KNPE 118. BOWLING II (2). Continuation of KNPE 117 with emphasis on the refinement of skills and an introduction to league bowling. Students should be able to demonstrate a 110 minimum bowling average at the beginning of the class.

KNPE 119. GOLF I (1). Introduction to golf with emphasis on fundamental skills, techniques, and strategy.

KNPE 120. GOLF II (2). Continuation of golf knowledges and techniques. Emphasis on consistent performance based on application of relevant kinesiological factors. PRQ: KNPE 119.

KNPE 122. RACQUETBALL (1). Fundamental skills, techniques, and strategies of racquetball. Eye protection required while on court.

KNPE 123. TENNIS I (1). Introduction to techniques and strategy of beginning tennis.

KNPE 124. TENNIS II (1). Continuation of techniques and strategy of tennis with consideration of kinesiological and physiological aspects. PRQ: KNPE 123.

KNPE 131. AIKIDO (1). Skills, techniques, and strategy of aikido.

KNPE 132. JUDO (1). Skills, techniques, and strategy of judo.

KNPE 133. KARATE (1). Skills, techniques, and strategy of karate.

KNPE 138. BASKETBALL I (1). Introduction to basketball including fundamental rules, techniques, and strategy.

KNPE 139. BASKETBALL II (1). Continuation of techniques and strategy of basketball with consideration of kinesiological and physiological factors. PRQ: KNPE 138.

KNPE 141. FLAG FOOTBALL (1). Fundamental skills, techniques, and strategy of flag football.

KNPE 142. SOCCER (1). Fundamental skills, techniques, and strategy of soccer.

KNPE 143. SOFTBALL (1). Fundamental skills and strategy of softball.

KNPE 145. VOLLEYBALL I (1). Introduction to volleyball skills, techniques, and strategy.

KNPE 146. VOLLEYBALL II (2). Continuation of skills, techniques, and strategy of volleyball, including consideration of basic physiological, kinesiological, and biomechanical principles. PRQ: KNPE 145.

KNPE 168. LEARN TO SWIM (1). Water adjustment skills, basic strokes, and water entry techniques for the nonswimmer.

KNPE 169. SWIMMING I (1). Basic water adjustment skills, strokes, and diving for the beginner.

KNPE 170. SWIMMING II (1). Intermediate swimming. Includes strokes, dives, safety skills.

#KNPE 174. SKIN AND SCUBA DIVING (2). Development of skill and knowledge leading to PADI (Professional Association of Diving Instructors) open-water diver certification. PRQ: University medical clearance and consent of department.

KNPE 177. SWIMMING CONDITIONING (2). Concepts of physical fitness and their application through aquatic exercise programs. PRQ: Ability to swim in deep water.

#KNPE 182. CANOEING I (1). Basic skills and knowledges of canoeing including safety procedures and recreational aspects. PRQ: Ability to swim in deep water.

KNPE 186. HORSEBACK RIDING I (1). Fundamental equestrian skills, techniques, and knowledge.

KNPE 187. HORSEBACK RIDING II (1). Continuation of basic horseback riding with emphasis on communicating with the horse more quietly and efficiently. Understanding of equine behavior as it applies to signs of discomfort or illness versus signs of feeling good. PRQ: KNPE 186.

KNPE 188. MARATHON TRAINING (2). Theoretical and applied principles and practices of training to run in marathons.

KNPE 190. TUMBLING (1). Fundamental skills and techniques of tumbling.

KNPE 193. TUMBLING AND FLOOR EXERCISE (2). Intermediate tumbling skills with variations applicable to floor exercise composition. PRQ: KNPE 190 or consent of department.

#KNPE 196. BASIC CLIMBING AND RAPPELLING (2). Introduction to basic skills and principles of rock climbing (free) and rappelling, including equipment selection and technique analysis and evaluation.

KNPE 197. BICYCLING (1). Instruction in derailleur gearing, riding techniques as well as safety and psychological, sociological, and physiological benefits of bicycling. Directed to a variety of bicycling competencies; designed for road biking on prescribed courses. Bicycling helmet and bikes in good mechanical working order required.

KNPE 198. PRACTICUM IN PHYSICAL EDUCATION: MILITARY TRAINING (2). Emphasis on participation in physical fitness activities, development of strength, endurance, and fitness; and development of leadership skills. May be repeated to a maximum of 6 semester hours.

KNPE 199H. MAN, MOVEMENT, AND ENVIRONMENT (1). A living-learning experience for honors students at a field campus where special utilization can be made of the natural environment. Includes the physiological, sociological, and kinesiological foundations of physical education.

KNPE 200. INTRODUCTION TO TEACHING PHYSICAL EDUCATION (2). Survey of the profession of teaching physical education. To be taken within the first 30 semester hours of professional course work. PRQ: Declared physical education major.

KNPE 201. INTRODUCTION TO EXERCISE SCIENCE AND SPORT PROFESSIONS (3). Professionals' roles in and competencies to preventive and rehabilitative exercise and sport industry careers. PRQ: Declared kinesiology or physical education major; to be taken within the first 30 semester hours of professional course work.

KNPE 202. INTRODUCTION TO ATHLETIC TRAINING (1). Introduction to professional expectations, behaviors, and development in athletic training. CRQ: KNPE 264.

KNPE 205. NONTRADITIONAL PHYSICAL EDUCATION ACTIVITIES (½). Introduction to and practice of cooperative activities and nontraditional games suitable for elementary, middle, and high school settings. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 208. FLAG FOOTBALL (½). Skills, techniques, and strategies of flag football. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 209. TUMBLING (½). Skills and techniques of tumbling. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 212. TRACK AND FIELD (1). Skills, techniques, and strategies in track and field. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 213. BASKETBALL (½). Skills, techniques, and strategies in basketball.

KNPE 215. SOFTBALL (½). Skills, techniques, and strategies in softball. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 217. PERSONAL HEALTH-RELATED FITNESS DEVELOPMENT (1). Study of health-related fitness components. Design, plan, implementation, and evaluation in a personal health-related fitness program. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 218. VOLLEYBALL (½). Skills, techniques, and strategies of volleyball. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 219. SOCCER (½). Skills, techniques, and strategies of soccer. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 220. BADMINTON (½). Skills, techniques, and strategies of badminton. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 221. GOLF AND ARCHERY (½). Skills, techniques, and strategies of golf and archery. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 223. TENNIS (½). Skills, techniques, and strategies of tennis. PRQ: Kinesiology or physical education major or minor, or consent of department.

KNPE 225. FUNDAMENTAL SPORT SKILLS I (2). Skill development, performance, and analysis of basketball, soccer, softball, and volleyball. PRQ: Physical education major or minor.

KNPE 226. FUNDAMENTAL SPORT SKILLS II (2). Skill development, performance, and analysis of badminton, flag football, tennis, and track and field. PRQ: Physical education major or minor.

KNPE 227. RHYTHMIC AND COOPERATIVE GYMNASTICS (½). Rhythmic sequences of gymnastics movements with a variety of rhythmic gymnastics implements. Creative and cooperative gymnastics movement sequences on balance beam and floor.

KNPE 230. LIFEGUARD TRAINING (2). Proficient development of rescue techniques and safety supervision skills enabling student to qualify for American Red Cross Lifeguard Training Certification. Certification contingent on evidence of current Standard First Aid certification. PRQ: Ability to swim 500 yards continuously using each of the following strokes for at least 50 yards: crawl, breast stroke, elementary back stroke, and side stroke. Surface dive to a minimum depth of 9 feet and bring a 10-lb diving brick to the surface.

KNPE 231. WATER SAFETY INSTRUCTOR (2). Experience in perfecting and teaching swimming and aquatic safety skills to meet requirements for American Red Cross (ARC) instructor certification. Analysis of skills and techniques of teaching swimming, diving, and aquatic skills for all populations. Successful completion of course requirements may lead to American Red Cross certification. PRQ: Must have knowledge and demonstrate proficiency in the standing front dive and in the following strokes: freestyle, backstroke, sidestroke, breaststroke, elementary backstroke, and butterfly.

KNPE 240. AQUATIC FITNESS (1). Techniques and materials needed to develop aquatic exercise programs. PRQ: KNPE 217.

KNPE 241. AEROBIC FITNESS (1). Application of aerobic training principles and program design. PRQ: KNPE 217.

KNPE 242. TECHNIQUES OF RESISTANCE TRAINING (1). Fundamental techniques of resistance training applied to development of muscular fitness. Assessment of muscular fitness and development of personal resistance training programs. PRQ: KNPE 217 and kinesiology or physical education major or minor, or consent of department.

KNPE 243. PROGRAM DEVELOPMENT OF RESISTANCE TRAINING (1). Theory and application of resistance training, including program development for a variety of populations. PRQ: KNPE 217 and kinesiology or physical education major or minor, or consent of department. CRQ: KNPE 242.

KNPE 245. PHYSICAL EDUCATION FOR CHILDREN (3). Bases for planning experiences in physical education for children, derived from study of human movement and developmental needs of children. For students seeking elementary and special education certification only.

KNPE 260. FIRST AID AND EMERGENCY CARE (2). Vital and practical applications and procedures in caring for an injured person. Includes safety, emergency childbirth, Heimlich method in choking, splinting, and bandaging. American National Red Cross standard first aid certification upon completion.

KNPE 261. THEORY AND PRACTICE OF CARDIOPULMONARY RESUSCITATION (1). Investigation and application of current procedures used in emergency first aid for respiratory failure and cardiac arrest in victims of all ages. American National Red Cross Community cardiopulmonary (CPR) certification granted upon successful completion.

KNPE 262. FIRST AID AND CPR (2). Vital and practical applications and procedures in caring for an injured or ill person. Includes safety, emergency action principles, breathing and cardiac emergencies, wound care, sudden illness, and other emergency situations. National Safety Council First Aid and CPR certificates granted upon successful completion of course and ARC NSC requirements.

KNPE 264. PRINCIPLES OF INJURY PREVENTION AND CARE (3). Introduction to the field of athletic training and those principles of injury prevention and care for the physically active. Applications to a variety of settings. CRQ: BIOS 311 or BIOS 357.

KNPE 265. PRACTICUM IN ATHLETIC TRAINING (3). Practical application of selected athletic training procedures including equipment fitting, preventive taping, prophylactic braces, immobilization, crutch fitting, spineboard application, acute care and observation of traditional and clinical athletic training sites. CRQ: KNPE 264 and admission to emphasis in athletic training.

KNPE 275. BASEBALL/SOFTBALL OFFICIATING (1). Skills, techniques, and mechanics of officiating baseball and softball. Preparation to qualify for rating by certificating agency.

KNPE 276. BASKETBALL OFFICIATING (1). Skills, techniques, and mechanics of officiating basketball. Preparation to qualify for rating by certificating agency.

KNPE 278. FOOTBALL OFFICIATING (1). Techniques and mechanics of officiating, relation of the official to the Illinois High School Association, the school coaches, and team members.

KNPE 282. COMPETITIVE SWIMMING/DIVING OFFICIATING (1). Skills, techniques, and mechanics of officiating swimming and diving. Preparation to qualify for rating by certifying agency.

KNPE 284. TRACK AND FIELD OFFICIATING (1). Technique of officiating; study of rules; relation of the official to the Illinois High School Athletic Association, the school coaches, and team members.

KNPE 285. VOLLEYBALL OFFICIATING (1). Instruction in volleyball officiating and preparation to qualify for official's rating. Outside practice required.

KNPE 306. SPORTS NUTRITION (1). Theory and practice of nutritional concerns in exercise and sport. Nutritional strategies to support level of training and type of sport. Nutritional ergogenic issues. CRQ: FCNS 306.

KNPE 310. PSYCHOLOGICAL ASPECTS OF SPORT AND EXERCISE (3). Study of psychological aspects related to sport and exercise participation including application of those principles to preventive and rehabilitative physical activity and sport performance. PRQ: PSYC 102 or PSYC 219.

KNPE 313. MECHANICAL KINESIOLOGY OF MOTOR SKILLS (3). Study of anatomical and mechanical principles of human movement and application of these principles to the analysis and teaching of motor skills. PRQ: BIOS 311 or BIOS 357, or consent of department.

KNPE 314. APPLIED KINESIOLOGY (4). Study of anatomical and mechanical principles of human movement and application of these principles to the analysis of motor skills. Laboratory experiences provide an opportunity for the application of knowledges acquired in lecturediscussion. PRQ: BIOS 311 or BIOS 357, and a grade of C or better in the university's English and mathematics core competencies, excluding MATH 201. Recommended: Course in introductory physics.

KNPE 316. SELF-IMPROVEMENT THROUGH POSTURE EDUCATION AND RELAXATION TECHNIQUES (2). Physiological, neurological, and psychological considerations relevant to the study of posture and relaxation. Analysis and procedures for the control of atypical deviations and training in tension reduction methods for self-improvement.

KNPE 317. STRESS MANAGEMENT PROGRAMMING FOR FITNESS LEADERS (3). Comprehensive review of stress and health including physiological, neurological, immunological, and psychological components. Analysis of stress assessment measures, coping strategies, and relaxation techniques. Application of content to the sport/fitness industry. Design of a stress management program. PRQ: Kinesiology or physical education major or minor.

KNPE 322. CLINICAL PROFICIENCIES IN ATHLETIC TRAINING: UPPER-EXTREMITY ASSESSMENT (2). Laboratory experience in development of upper-extremity/body clinical assessment skills under direct supervision of an athletic training approved clinical instructor. CRQ: KNPE 325.

KNPE 323. CLINICAL PROFICIENCIES IN ATHLETIC TRAINING: LOWER-EXTREMITY ASSESSMENT (2). Laboratory experience in the development of lower-extremity/body clinical assessment skills under the direct supervision of an athletic training approved clinical instructor. CRQ: KNPE 324.

KNPE 324. ASSESSMENT OF LOWER-EXTREMITY INJURY (3). Indepth study of the assessment and recognition of common lower-extremity injuries and lower axial injuries in the physically active population. Emphasis on procedures and techniques in the assessment of injury. PRQ: KNPE 264, KNPE 265, and BIOS 311 or BIOS 357.

KNPE 325. ASSESSMENT OF UPPER-EXTREMITY INJURY (3). In-depth study of the assessment and recognition of common upper-extremity injuries and upper axial injuries in the physically active population. Emphasis on procedures and techniques in the assessment of injury. PRQ: KNPE 264, KNPE 265, and BIOS 311 or BIOS 357.

KNPE 326. THERAPEUTIC MODALITIES AND TREATMENT OF ATHLETIC INJURIES (3). Advanced principles of athletic training with emphasis on tissue healing processes, application of therapeutic modalities, and clinical decision making during rehabilitation of the physically active population. Lecture and laboratory. PRQ: KNPE 324 or KNPE 325. CRQ: KNPE 431.

KNPE 331. CLINICAL EXPERIENCE IN ATHLETIC TRAINING I (3). Pre-professional clinical, field, and first responder experiences in a diverse, service-learning partnership. Review and refinement of psychomotor athletic training skills and dispositions with the primary focus on prevention, emergency care, and therapeutic modalities. PRQ: KNPE 264. CRQ: KNPE 325.

KNPE 332. CLINICAL EXPERIENCE IN ATHLETIC TRAINING II (3). Pre-professional clinical, field, and first responder experiences in a diverse, service-learning partnership. Review and refinement of psychomotor athletic training skills and dispositions with the primary focus on assessment of upper-extremity injury. PRQ: KNPE 325 and KNPE 331. CRQ: KNPE 324.

KNPE 335. DEVELOPMENTAL SKILL-BASED APPROACH TO TEACHING (3). Teaching experience using the stages of games developmental approach in a technical model. Creation of block, unit, and lesson plans for curriculum development in basketball, soccer, and volleyball. PRQ: KNPE 225 and physical education major or minor.

KNPE 336. FITNESS EDUCATION (1). Teaching experience using a fitness education model. Creation of block, unit, and lesson plans for curriculum development in learners' health-related fitness from grades K- 12. PRQ: KNPE 217, KNPE 452 and KNPE 240, KNPE 241 or KNPE 242, and physical education major or minor.

KNPE 340. GROWTH AND MOTOR DEVELOPMENT (3). Growth and maturation factors that influence the development and learning of motor skills. Developmental changes in motor behavior from infancy to adulthood. A developmental approach to the teaching of new motor skills.

KNPE 343. ELEMENTARY SCHOOL PHYSICAL EDUCATION/ METHODS AND FIELD EXPERIENCE (3). Bases for planning experiences in movement education for children, derived from study of human movement and developmental needs of children. Field experiences including observations and the teaching of games and sports to young children. PRQ: Successful completion of the PPST/ Praxis I, minimum 2.50 overall GPA, and proof of TB clearance. CRQ: KNPE 340.

KNPE 344. FIELD EXPERIENCE IN THE ELEMENTARY SCHOOL (1). Practicum in supervised experiences that include observations, small group teaching, and large group teaching in the public and/or parochial schools. CRQ: KNPE 343.

KNPE 348. EDUCATIONAL DANCE FOR CHILDREN (2). Communication and expression through movement with emphasis on creative rhythms and dance for children. Includes observations and teaching experiences. PRQ: Kinesiology or physical education major or minor, KNDN 216, or consent of department.

KNPE 352. ANALYSIS AND TEACHING STRATEGIES OF SPORTS (3). Analysis of skills and teaching strategies of team and individual sports. Class management skills. PRQ: KNPE 220 or KNPE 223 and two courses from KNPE 208, KNPE 213, KNPE 215, KNPE 218, and KNPE 219.

KNPE 354. ANALYSIS AND TECHNIQUES OF TEACHING DANCE FITNESS (2). Analysis of skills and techniques of teaching fitness through dance. Emphasis on dance forms and application of physiological and kinesiological principles of movement. PRQ: KNPE 217 or consent of department.

KNPE 360. METHODS OF TEACHING FIRST AID AND SAFETY (2). National Red Cross instructor's first aid course. Study of first aid content presented in the teaching of first aid. Practices of safety education. Standard instructor's certification upon completion. PRQ: American Red Cross current standard certificate.

KNPE 365. INTRODUCTION TO ADVENTURE EDUCATION (3). Experience in teaching and participating in team-building, initiatives, challenge, and adventure activities. Creation of block, unit, and lesson plans for curriculum development in adventure education. PRQ: KNPE 335 and physical education major or minor. CRQ: KNPE 421.

KNPE 366. LIFETIME SPORTS AND ACTIVITIES (3). Experience in teaching and participating in activities designed to develop lifelong patterns of physical activity. Creation of block, unit, and lesson plans for curriculum development in a lifetime physical activities model. PRQ: KNPE 335 and physical education major or minor. CRQ: KNPE 421.

KNPE 367. TACTICAL APPROACH TO TEACHING GAMES (3). Teaching experience using a tactical approach to teaching games. Creation of block, unit, and lesson plans for curriculum development in an invasion game (basketball), a net/court game (badminton), a target game (golf), and a run/scoring game (softball). PRQ: KNPE 335 and physical education major or minor. CRQ: KNPE 446.

KNPE 368. SPORT EDUCATION (3). Gain teaching experience using a sport education model. Create block, unit, and lesson plans designed to teach a variety of roles in the sports of badminton, basketball, and softball. PRQ: KNPE 335 and physical education major or minor. CRQ: KNPE 446.

KNPE 374. COACHING FAST-PITCH SOFTBALL (2). Individual skills and team techniques, rules, and strategies of fast-pitch softball. Emphasis on coaching and team management.

KNPE 375. THEORY AND PRACTICE OF COACHING BASEBALL/ SOFTBALL (2). Individual skills and team techniques, rules, and strategy of baseball and softball. Emphasis on coaching and team management.

KNPE 376. THEORY AND PRACTICE OF COACHING BASKETBALL (2). Coaching and training of basketball teams, including fundamentals, systems of offensive and defensive play, coaching strategies, and organization.

KNPE 378. THEORY AND PRACTICE OF COACHING FOOTBALL (2). Coaching and training of football teams. Fundamentals of individual position play, systems of offense and defense, coaching strategies, and team organization.

KNPE 379. THEORY AND PRACTICE OF COACHING GOLF (2). Coaching and training of golf athletes. Emphasis on advanced swing analysis and team management.

KNPE 381. THEORY AND PRACTICE OF COACHING SOCCER (2). Skills used in soccer competition and methods used to teach these skills. Rules and game organization. Coaching techniques for various strategies of the game. Skill practice and the attainment of basic skill level required.

KNPE 383. THEORY AND PRACTICE OF COACHING COMPETITIVE SWIMMING (2). Analysis, methods, and techniques of coaching competitive swimming. Designed to meet the needs of the prospective coach of a competitive swim team.

KNPE 384. THEORY AND PRACTICE OF COACHING TRACK AND FIELD (2). Knowledges of standard track and field events. Methods and analysis of teaching skill development and performance. Rules, officiating, and meet organization.

KNPE 385. THEORY AND PRACTICE OF COACHING VOLLEYBALL (2). Theory and application of volleyball coaching with emphasis on advanced skill technique, conditioning, drills, offensive and defensive strategy, line-up design, team statistics, rule interpretation, and psychological motivation. PRQ: KNPE 146.

KNPE 393. SOCIAL ASPECTS OF SPORT (3). Relevance of sport in modern society, impact of sport on society, and the influence which cultural institutions have on sport. Laboratory experiences and personal investigations.

KNPE 420. CURRICULUM DESIGNS IN ELEMENTARY SCHOOL PHYSICAL EDUCATION (3). Introduction to elementary school physical education curriculum with attention to organization and implementation of programs. PRQ: Consent of department.

KNPE 421. CURRICULUM DESIGNS IN MIDDLE AND HIGH SCHOOL PHYSICAL EDUCATION (2). Study of school program content in physical education. Classification of activities for selecting and organizing subject matter. Comparisons and contrasts of the unique curricular concerns and values of middle and high school programs. PRQ: Successful completion of the ICTS Basic Skills Test and minimum 2.50 GPA, or consent of department. CRQ: KNPE 449, KNPE 466, KNPE 467, and KNPE 468.

KNPE 422. MOTOR DEVELOPMENT LABORATORY (1). Planning, implementing, and evaluating developmental physical education lessons for young children. Includes fundamental motor skills, physical fitness, rhythmical activities, movement concepts, games, gymnastics, dance, and social skills. PRQ: KNPE 343 or consent of department.

KNPE 425. FITNESS INTERVENTION IN ELEMENTARY PHYSICAL EDUCATION (2). Bases for planning fitness experiences for children, derived from the application of scientific principles and the study of intervention fitness programs. PRQ: KNPE 245 or KNPE 343 and KNPE 451 or KNPE 452, or consent of department.

KNPE 427. CLINICAL PROFICIENCIES IN ATHLETIC TRAINING: THERAPEUTIC MODALITIES AND EXERCISE (2). Laboratory experience in development of clinical skills for therapeutic modalities and exercise under direct supervision of an athletic training approved clinical instructor. CRQ: KNPE 491.

KNPE 433. EFFECTIVE COMMUNICATION AND CASE MANAGEMENT SKILLS IN ATHLETIC TRAINING (2). Laboratory experience in understanding of and technical skills in athletic training administration under direct supervision of an athletic training approved clinical instructor. CRQ: KNPE 440.

KNPE 434. CLINICAL EXPERIENCE IN ATHLETIC TRAINING III (3). Pre-professional clinical, field, and first responder experiences in a diverse, service-learning partnership. Review and refinement of psychomotor athletic training skills and dispositions with a primary focus on assessing lower-extremity injuries. PRQ: KNPE 324 and KNPE 332. CRQ: KNPE 326.

KNPE 435. CLINICAL EXPERIENCE IN ATHLETIC TRAINING IV (3). Pre-professional clinical, field and first responder experiences in a diverse, service-learning partnership. Review and refinement of psychomotor athletic training skills and dispositions with a primary focus on athletic injury rehabilitation, general medical conditions, and therapeutic modalities. PRQ: KNPE 326 and KNPE 434. CRQ: KNPE 433.

KNPE 440. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND ATHLETICS (3). Organization and administration of physical education, athletic training, and interscholastic athletic programs. Emphasis on factors essential to the administration and program development in these areas.

KNPE 445. MEASUREMENT AND EVALUATION IN EXERCISE SCIENCE (3). Introduction to measurement and evaluation concepts and processes. Emphasis on affective and psychomotor assessment in nonschool settings. Does not meet teacher certification requirements. PRQ: Junior standing, KNPE 217, and a grade of C or better in the university's English and mathematics core competencies, excluding MATH 201.

KNPE 446. MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION SCHOOL SETTINGS (3). Introduction and application of measurement and evaluation tools and techniques in school-based physical education programs. Emphasis on assessment of psychomotor performance and cognitive domains. PRQ: KNPE 343, successful completion of the ICTS Basic Skills Test, and a minimum 2.50 GPA.

KNPE 449. CURRENT ISSUES IN PHYSICAL EDUCATION AND SPORT (2). Study of current issues and problems in physical education and interscholastic sport through examination and critical analysis of recent literature. Emphasis on using critical thinking skills and strategies.

KNPE 451. PHYSIOLOGY OF EXERCISE (3). Physiology of skeletal, nervous, muscular, respiratory, cardiovascular, and endocrine systems, with emphasis on the effects of physical exercise. PRQ: BIOS 311 or BIOS 357, or consent of department.

KNPE 452. APPLIED PHYSIOLOGY OF EXERCISE (4). Cardiovascular, respiratory, metabolic, and neuromuscular aspects of human function at rest, during exercise, and as the result of training. Three hours per week of lecture plus arranged laboratory experience. PRQ: BIOS 311 or BIOS 357 and grade of C or better in the university's English and mathematics core competencies except MATH 201.

KNPE 453. EXERCISE PROGRAMS FOR ADULT SPECIAL POPULATIONS (3). Examination of characteristics, physiological responses, and exercise adaptations of adult special populations. Includes exercise testing, physical activity prescription, and clinical experiences. Emphasis on exercise limitations, responses, and adaptations which differ from the nondisabled. PRQ: KNPE 452. CRQ: KNPE 493 for 1 semester hour.

KNPE 454. EXERCISE GERONTOLOGY (3). Examination of characteristics of, physiological responses to, and adaptations to exercise of older adult populations. Includes exercise testing and prescription, programmatic concerns, and exercise limitations for older adults. PRQ: BIOS 357 or KNPE 452. CRQ: KNPE 493 for 1 semester hour.

KNPE 457. ANALYSIS AND TECHNIQUES OF TRAINING AND CONDITIONING (3). Design of training and conditioning programs; development of exercise leadership skills. PRQ: KNPE 217, KNPE 241, and KNPE 242. CRQ: KNPE 451 or KNPE 452.

#KNPE 458. STRESS TESTING (3). Theory, techniques, and procedures of graded exercise stress testing for diagnostic and functional assessment of individuals. PRQ: KNPE 452 with a grade of C or better.

KNPE 459. PHYSICAL FITNESS PROGRAMMING (3). Development, organization, implementation, and administration of physical fitness programs. Includes field experience. PRQ: KNPE 458 with a grade of C or better.

KNPE 460. CARDIOPULMONARY DISEASE AND REHABILITATION (3). Development and administration of cardiopulmonary rehabilitation programs. Emphasis on prevention, etiology, basic pathophysiology, understanding the physician's diagnosis of cardiopulmonary disease, and the role of an exercise specialist in the rehabilitation of patients in a clinical setting. CRQ: KNPE 458.

KNPE 465. METHODS OF TEACHING MIDDLE AND HIGH SCHOOL PHYSICAL EDUCATION (3). Growth and development, learning styles, and teaching behavior and methodology as applied to middle and high school physical education. PRQ: KNPE 343, KNPE 446, minimum 2.50 university GPA, successful completion of the PPST/Praxis I, or consent of department. CRQ: KNPE 421, KNPE 466 or KNPE 467 or KNPE 468.

KNPE 466. FIELD EXPERIENCE AT OUTDOOR ENVIRONMENTS (1). Observations, small group teaching, large group teaching, and team teaching in an outdoor education setting with students of multicultural backgrounds. CRQ: KNPE 465.

KNPE 467. FIELD EXPERIENCE IN THE MIDDLE SCHOOL (1). Practicum in supervised experiences that include observations, small group teaching, and large group teaching in the public and/or parochial schools. CRQ: KNPE 465.

KNPE 468. FIELD EXPERIENCE IN THE HIGH SCHOOL (1). Practicum in supervised experience that includes observations, small group teaching, and large group teaching in the public and/or parochial schools. CRQ: KNPE 465.

KNPE 474. MEDICAL ISSUES IN ATHLETIC TRAINING (3). Nonorthopedic medical conditions common to the physically active population. Discussions focus on pathology, etiology, signs and symptoms, clinical assessments, and indicators for referral and other plans of action. PRQ: Consent of department.

KNPE 480. PRINCIPLES AND PROBLEMS OF COACHING (3). Technical coaching information concerning personnel relationships with other coaches and players, organization and contest management, traveling rules, coaching ethics, and evaluation of personnel. Administrative aspects of budget, records, scheduling, and equipment.

KNPE 483. ELEMENTARY SCHOOL STUDENT TEACHING IN PHYSICAL EDUCATION (6). Student teaching for eight weeks in elementary school physical education. Also includes seminars on current issues in teaching physical education. Assignments to be arranged with the department coordinator of clinical experiences. See "Teacher Certification Requirements." PRQ: EPS 405, or EPS 406, or EPS 508 and KNPE 465, and consent of department.

KNPE 484. MIDDLE SCHOOL STUDENT TEACHING IN PHYSICAL EDUCATION (6). Student teaching for eight weeks in middle school physical education. Also includes seminars on current issues in teaching physical education. Assignments to be arranged with the department coordinator of clinical experiences. See "Teacher Certification Requirements." PRQ: EPS 405, or EPS 406, or EPS 508 and KNPE 465, and consent of department.

KNPE 485. SECONDARY SCHOOL STUDENT TEACHING IN PHYSICAL EDUCATION (6). Student teaching for eight weeks in secondary school physical education. Also includes seminars on current issues in teaching physical education. Assignments to be arranged with the department coordinator of clinical experiences. See "Teacher Certification Requirements." PRQ: EPS 405, or EPS 406, or EPS 508 and KNPE 465, and consent of department.

KNPE 486. PRINCIPLES OF MOTOR LEARNING AND PERFORMANCE (3). Study of concepts, laws, and theories that govern performance in the psychomotor domain and their relationships to the principles and theories of learning motor skills. PRQ: Junior standing or consent of department.

KNPE 490. ADAPTED PHYSICAL EDUCATION (3). Examination of physical education instruction and curriculum development to meet the needs of individuals with disabilities. Includes instructional strategies for properly integrating students with disabilities into the regular physical education program and a clinical experience. PRQ: KNPE 340 required only for B.S.Ed. physical education majors. CRQ: KNPE 492.

KNPE 491. THERAPEUTIC EXERCISE (3). Principles and application of exercises for selected skeletal and muscular dysfunction. PRQ: BIOS 311 or consent of department.

KNPE 492. SPECIAL PHYSICAL EDUCATION CLINIC PRACTICUM (1 to 2). Planning, implementing, and evaluating individualized developmental and/or adapted physical activity programs for individuals with disabilities through teaching motor development, physical fitness, sports skills, aquatics, and dance. May be repeated once for a total of 3 semester hours. CRQ: KNPE 490.

KNPE 493. SUPERVISED CLINICAL EXPERIENCE IN EXERCISE GERONTOLOGY (1 to 3). Implementing an exercise program for healthy adult populations. Includes practicum. May be repeated to a maximum of 3 semester hours. PRQ: KNPE 452 or consent of department.

KNPE 494. INTERNSHIP IN KINESIOLOGY (1 to 6). Internship experience for students in B.S. degree program in kinesiology. May be repeated to a maximum of 6 semester hours. PRQ: Minimum overall 2.15 GPA, minimum 2.50 GPA in required courses in the major, and consent of department.

KNPE 495. WORKSHOP IN PHYSICAL EDUCATION (1 to 3). Designed for the study of selected current issues, problems, and methods of teaching. May be repeated to a maximum of 12 semester hours when content varies. PRQ: Acceptance by director of workshop.

KNPE 496. SEMINAR IN SPECIAL TOPICS (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies. PRQ: Junior standing and consent of department.

KNPE 497. SENIOR SEMINAR (1). Review of current issues in physical education and health education in the school program. Designed to be taken during the same semester as student teaching. PRQ: Senior standing and consent of department.

KNPE 498. INDEPENDENT STUDY (1 to 3). Individual study involving research or other scholarly work in physical education under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Senior standing, GPA of 3.00, consent of faculty member and department chair.

Sport Management (LESM)

LESM 438. SPORT AND FITNESS MANAGEMENT STRATEGIES (3). Management functions as each relates to sport and fitness organizations. Investigation of managerial roles and skills, and their effects on interpersonal, group, and organizational relationships. PRQ: KNPE 201, C or better in the university's English core competency, grade of C or better in MATH 101, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229.

LESM 439. LEGAL AND ETHICAL ASPECTS OF SPORT AND FITNESS (3). Overview of the United States legal system, different forms of legal liability and legal issues with application to the sport and fitness industries. Nature and role of ethics in sport and fitness. PRQ: KNPE 201, grade of C or better in the university's English core competency, grade of C or better in MATH 101, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229. LESM

LESM 442. PROMOTION OF SPORT AND FITNESS PROGRAMS (3). Principles of organizing and promoting events and activities associated with sports and fitness. PRQ: KNPE 201, grade of C or better in the university's English core competency, grade of C or better in MATH 101, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229.

LESM 486. INTERNSHIP IN SPORT MANAGEMENT (1 to 6). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

LESM 492. SEMINAR IN SPORT MANAGEMENT (3). Designed to meet the needs of particular students for specialized information. Topics announced. PRQ: At least junior standing.

LESM 497. INDEPENDENT STUDY IN SPORT MANAGEMENT (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Kinesiology and Physical Education Faculty

Paul Carpenter, Ph.D., University of California, Los Angeles, associate professor, chair
Jason Brandenberg, Ph.D., University of Victoria, assistant professor
Charles Carter, Ed.D., West Virginia University, associate professor
Rodney Caughron, Ph.D., University of Iowa, associate professor
Constance Fox, Ed.D., University of Georgia, associate professor
Clersida Garcia, Ph.D., Michigan State University, associate professor
Luis E. Garcia, Ph.D., Michigan State University, assistant professor
Danielle M. Jay, Ph.D., Texas Women's University, professor
Keith W. Lambrecht, Ph.D., Oregon State University, professor
Marilyn A. Looney, P.E.D., Indiana University, professor

Paul Luebbers, Ph.D., Virginia Commonwealth University, assistant professor
Pamela Macfarlane, Ph.D., University of Iowa, professor
Walt Owens, M.A., Western Michigan University, assistant professor
F. Jenny Parker, Ed.D., University of Massachusetts, associate professor
Lorenzo Parker, Ph.D., Michigan State University, assistant professor
William A. Pitney, Ed.D., Northern Illinois University, assistant professor
Sharon A. Plowman, Ph.D., University of Illinois, professor
Janet A. Rintala, Ph.D., University of Iowa, professor
Gretchen Schlabach, Ph.D., University of Maryland, associate professor
Moira Stuart, Ph.D., Oregon State University, assistant professor
Yoshiaki Takei, Ph.D., University of Southern California, professor
Lauriece Zittel, Ph.D. Oregon State University, associate professor

Department of Leadership, Educational Psychology and Foundations (EPFE, EPS, LEBM, LEEA)

The Department of Leadership, Educational Psychology and Foundations offers courses in educational administration, educational psychology, foundations of education, and school business management. The department engages students in the critical study of educational theory and practice, developing reflective educators who base their teaching, research, and policy decisions on historical, philosophical, psychological, and socialcultural perspectives. In addition, the department facilitates the development of leaders who actively shape organizational cultures, are sensitive to moral and equity issues, and can manage and lead complex and changing entities. The courses are essential for helping students become reflective practitioners while participating in undergraduate programs leading to teacher certification. The department also offers a course in education in a pluralistic society as part of the university's general education offerings.

Certificate of Undergraduate Study

Philosophy of Education (12)

This certificate is designed to provide close faculty mentoring of student investigations and projects for students who want to augment their interest in and commitment to philosophy of education. Students work under the guidance of a faculty adviser to extend their own belief systems through an examination of prominent educational philosophies and may focus on a particular educational problem or issue, the work of an individual thinker, investigation into a particular school of thought, strategies of educational policy analysis, or some other personally relevant topic. Study toward the certificate is open to any NIU undergraduate student with at least junior standing and consent of department. All requirements for the certificate must be completed within three calendar years.

Requirements

The certificate of undergraduate study in philosophy of education requires a minimum of 12 semester hours. Course work from the list below is chosen in consultation with certificate adviser. Students must complete a paper for EPFE 497 and/or develop a unit of instruction in EPFE 490.

EPFE 410 - Philosophy of Education (3)
EPFE 490 - Workshop in Education (3)
EPFE 492 - Special Topics in Foundations of Education (3)
EPFE 497 - Independent Study (3)
An upper-division course taken in the Department of Philosophy (3)
EPFE 510 - Philosophical Foundations of Education (3)

Course List

Educational Administration (LEEA)

LEEA 490. WORKSHOP IN EDUCATIONAL ADMINISTRATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of workshop.

LEEA 492. SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

LEEA 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Educational Psychology (EPS)

EPS 282X. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: ELEMENTARY EDUCATION (1 to 2). *Crosslisted as TLEE 282*. Pre-student-teaching practicum. Observation and analysis of curriculum, instruction, assessment, and behavior management in multicultural classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 20 clock hours per semester hour. May be repeated to a maximum of 4 semester hours. S/U grading. PRQ: Consent of elementary education adviser.

EPS 300. EDUCATIONAL PSYCHOLOGY (3). Application of psychological principles to teaching with attention given to the learning process. PRQ: GPA of 2.00 or higher and PSYC 102.

EPS 304. DEVELOPMENT OF THE ELEMENTARY SCHOOL CHILD (3). Psychological and social forces affecting development of children from birth through puberty. Emphasis on implications for school practice. PRQ: GPA of 2.50 or higher, PSYC 102, and sophomore standing.

EPS 307. DEVELOPMENT OF THE ADOLESCENT (3). Intellectual, social, personality, and physical development of the adolescent. Emphasis on implications for school practice. PRQ: PSYC 102.

EPS 405. ISSUES IN HUMAN DEVELOPMENT IN THE ELEMENTARY THROUGH HIGH SCHOOL YEARS (3). Cognitive, socioemotional, and physical development of children and adolescents within their families, schools, and sociocultural contexts. Focus on relationships between these aspects of student development and their implications for educational approaches and teaching within a school setting. Designed for students in physical education, special education, and visual and performing arts needing K-12 teacher certification. PRQ: PSYC 102, minimum GPA of 2.50, at least junior standing, and admission to a teacher certification program. CRQ: Documented clinical experience or supervised participation in schools.

EPS 406. ISSUES IN HUMAN DEVELOPMENT AND LEARNING IN THE MIDDLE SCHOOL AND HIGH SCHOOL YEARS (3). Cognitive, socioemotional, and physical characteristics of youth and their implications for educational practices with respect to student learning and performance in middle school and high school. Designed for students seeking teacher certification in grades 5-12 only. PRQ: PSYC 102, minimum GPA of 2.50, at least junior standing, and admission to a teacher certification program. CRQ: Clinical experience or supervised participation in schools.

EPS 413. CREATIVITY AND LEARNING (3). Preservice and inservice training for elementary and secondary teachers in the nature of creativity, the creative process, the creative person, and cultivation of the creative personality. Addresses the assessment of creative processes and products. Emphasis on the creative process as it relates to education and schools.

EPS 415. TRANSPERSONAL EDUCATION (3). Exploration of classroom applications of transpersonal psychology and educational implications of consciousness research.

EPS 419. THE MIDDLE SCHOOL CHILD (3). Examination of the match between characteristics of early adolescents (10-14 years) and characteristics of middle school programs. Biological, cultural, psychological, and social forces affecting the development of young adolescents. Focus on the role of the teacher, school, and community in helping the adolescent to deal with the impact of changes in these types of forces. PRQ: EPS 304, EPS 405, or EPS 406.

EPS 450X. CLASSROOM MANAGEMENT(2). *Crosslisted as TLCI 450.* Applications of motivation and management principles and procedures to maintain a positive learning environment in classrooms.

EPS 454. THE GIFTED STUDENT (3). Characteristics of the gifted. Emphasis on identification, growth and development, creativity, motivation, guidance, and evaluation of the gifted.

EPS 490. WORKSHOP IN EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of workshop.

EPS 492. SPECIAL TOPICS IN EDUCATIONAL PSYCHOLOGY (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

EPS 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Foundations of Education (EPFE)

EPFE 201. EDUCATION AS AN AGENT FOR CHANGE (3). Study of the complex problems facing educational and other institutions in our multicultural or pluralistic communities and the role of education as an agent for change.

EPFE 321. HISTORY OF AMERICAN EDUCATION (3). Survey of American education in relation to the main currents of American history. Includes religious, political, cultural, and demographic influences.

EPFE 400. FOUNDATIONS OF EDUCATION (3). Sociological, philosophical, and historical foundations of education. Curriculum development, multicultural concerns, and school organization are addressed in relation to teaching.

EPFE 410. PHILOSOPHY OF EDUCATION (3). Differentiates philosophy of education from other basic inquiry into education. Emphasis on standard forms of philosophical reasoning. Exploration of leading writings for their relevance to the improvement of instruction in a sociocultural context. PRQ: Junior standing.

EPFE 490. WORKSHOP IN EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of workshop.

EPFE 492. SPECIAL TOPICS IN FOUNDATIONS OF EDUCATION(1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

EPFE 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

School Business Management (LEBM)

LEBM 490. WORKSHOP IN EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of workshop.

LEBM 492. SPECIAL TOPICS IN SCHOOL BUSINESS MANAGEMENT (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

LEBM 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Leadership, Educational Psychology and Foundations Faculty

Wilma R. Miranda, Ph.D., State University of New York, Buffalo, professor, chair
Kerry Burch, Ph.D., University of Hawaii at Manoa, assistant professor
Jon Crawford, J.D., Ph.D., Iowa State University, assistant professor
Andrea E. Evans, Ph.D., University of Illinois, assistant professor
Donald Hunt, Ph.D., University of Albany, assistant professor
John W. Jacobson, Ed.D., Illinois State University, assistant professor
Christine Kiracofe, Ed.D., University of Georgia, assistant professor
Rosita Lopez, Ed.D., Northern Illinois University, associate professor
John Murphy, Ed.D., Northern Illinois University assistant professor
Diann Musial, Ed.D., Northern Illinois University, Distinguished Teaching Professor
Linda O'Neill, Ed.D., Northern Illinois University, assistant professor
Jean W. Pierce, Ph.D., Northwestern University, professor
Thomas B. Roberts, Ph.D., Stanford University, professor
Joseph Saban, Ed.D., Northern Illinois University, associate professor
Leslie A. Sassone, Ph.D., Purdue University, assistant professor
Jennifer Schmidt, Ph.D., University of Chicago, assistant professor
David Shernoff, Ph.D., University of Chicago, assistant professor
Hidetada Shimizu, Ed.D., Harvard University, associate professor
Lee B. Shumow, Ph.D., University of Wisconsin, professor
M Cecil Smith, Ph.D., University of Wisconsin, professor
Lucy F. Townsend, Ph.D., Loyola University of Chicago, professor
Marc VanOverbeke, Ph.D., University of Wisconsin, assistant professor
Teresa Wasonga, Ed.D., University of Missouri, assistant professor

Department of Literacy Education (LT--)

The Department of Literacy Education offers course work pertaining to literacy, intercultural, and language education across the lifespan, including work in reading, the language arts, children's literature, bilingual education, English as a second language, and multicultural education.

Course List

Bilingual/ESL (LTIC)

LTIC 301. TEACHING WITH A MULTICULTURAL PERSPECTIVE (3). *Crosslisted as TLCI 301X.* Examination and application of content materials focusing on cultural and linguistic diversity in the classroom and in society. Emphasis on role of teacher and school in providing information and instruction that promotes equitable and multicultural education for all students. Designed primarily for preservice teachers.

Deaf and Hard of Hearing (LTDH)

LTDH 365. INTRODUCTION TO DEAF STUDIES (3). Historical and current roles of deaf community and experience, causes of hearing losses, characteristics of deaf culture, and research dealing with artistic, educational, linguistic, psychological, sociological, and other aspects of the deaf community. PRQ: TLSE 240. CRQ: LTDH 382.

LTDH 382. CLINICAL EXPERIENCES IN SPECIAL EDUCATION: DEAF AND HARD OF HEARING (2). Observation and participation with deaf and hard-of-hearing students in public, private, and residential facilities. Emphasis on knowledge of variety of programs in Illinois. CRQ: LTDH 365.

LTDH 430X. AMERICAN SIGN LANGUAGE I (3). *Crosslisted as COMD 430.* Development of receptive and expressive skills in American Sign Language. Emphasis on developing skills in a non-English syntax system, and communication with hearing impaired people in activities of daily living. Three hours of lecture and one hour of laboratory. PRQ: Consent of department.

LTDH 431X. AMERICAN SIGN LANGUAGE II (3). *Crosslisted as COMD 431.* Continuation of LTDH 430X emphasizing the improvement of communicative skills. Three hours of lecture and one hour of laboratory. PRQ: LTDH 430X or COMD 430 or consent of department.

LTDH 432X. AMERICAN SIGN LANGUAGE III (3). *Crosslisted as COMD 432.* Continuation of LTDH 431X with emphasis on developing fluency in American Sign Language. Three hours of lecture and one hour of laboratory. PRQ: LTDH 431X or COMD 431 or consent of department.

LTDH 452. INTRODUCTION TO THE EDUCATION OF THE DEAF (2). Overview of education of the deaf and hard of hearing. Causes and effects of different types of hearing loss. Role of the teacher, speech and language clinician, audiologist, and others dealing with the problems of the acoustically handicapped. PRQ: TLSE 240.

LTDH 467. COMMUNICATION AND CURRICULUM FOR PRESCHOOL STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). Designed to provide techniques for the development of speech articulation, oral and/ or manual language, prereading and prewriting skills with preschool students who are deaf or hard of hearing. Emphasis on integration of communication (including auditory training and speech-reading) and cognitive curriculum. PRQ: COMD 403 or LTLA 403X, LTDH 365, LTDH 382, TLSE 447, junior standing, GPA of at least 2.50, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test and the Syntax Examination for the emphasis in deaf and hard of hearing.

LTDH 468. COMMUNICATION AND CURRICULUM FOR ELEMENTARY STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). Focus on bilingual and bimodal language development and literacy attainment for elementary students who are deaf or hard of hearing. Emphasis on methods of teaching content subjects, speech, and auditory training. PRQ: COMD 403 or LTLA 403X, LTDH 365, LTDH 382, TLSE 447, junior standing, GPA of at least 2.50, and successful completion of the PPST/ Praxis I or the ICTS Basic Skills Test and the Syntax Examination for the emphasis in deaf and hard of hearing.

LTDH 469. COMMUNICATION AND CURRICULUM FOR SECONDARY STUDENTS WHO ARE DEAF OR HARD OF HEARING (3). Methods of assessing and teaching secondary students who are deaf or hard of hearing; incorporating the teaching of language and speech in academic areas. PRQ: COMD 403 or LTLA 403X, LTDH 365, LTDH 382, LTDH 467, LTDH 468, TLSE 447, TLSE 482, junior standing, GPA of at least 2.50, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test.

LTDH 485. STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION: DEAF AND HARD OF HEARING(3 to 12). Supervised student teaching of exceptional learners in diverse cultural and educational settings. All students must satisfy the regulations governing student teaching. May be repeated to a maximum of 18 semester hours. PRQ: Completion of professional education and related course work or consent of department.

LTDH 486. STUDENT TEACHING IN SECONDARY SPECIAL EDUCATION: DEAF AND HARD OF HEARING(3 to 18). Supervised student teaching of exceptional adolescents in public school or special institution settings with diverse populations at the secondary level. All students must satisfy the regulations governing student teaching. May be repeated to a maximum of 18 semester hours for students seeking more than one certification. PRQ: Completion of professional education and related course work.

Language Arts (LTLA)

LTLA 341. LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3). Development of an effective language arts program with emphasis on instructional methods and materials. PRQ: GPA of at least 2.75, junior standing, and successful completion of the ICTS Basic Skills Test.

LTLA 361. LITERATURE FOR THE YOUNG CHILD (3). Role of literature in promoting language, cognition, and social development in young children (0-8 years old).

LTLA 362. CHILDREN'S LITERATURE IN A MULTICULTURAL SOCIETY (3). Introduction to children's literature across cultures, types, and historical periods with emphasis on selection and classroom applications.

LTLA 363. YOUNG ADULT LITERATURE IN A MULTICULTURAL SOCIETY (3). Young adult literature across cultures, types, and historical periods with emphasis on classroom applications, and the diverse needs of middle- and high-school students

LTLA 403X. LANGUAGE DEVELOPMENT IN CHILDREN (3). *Crosslisted as COMD 403.* Overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence.

LTLA 430. CONTEMPORARY LANGUAGE ARTS (3). Introduction to contemporary applied language arts programs. Emphasis on methods, materials, and instructional procedures for elementary school children. PRQ: Junior standing.

Reading (LTRE)

LTRE 100. COMMUNICATION SKILLS (READING) (1 to 3). For students whose chances of success in college will be significantly improved through intensive work in communication skills. Offered in conjunction with ENGL 103P and COMS 100P. Focus on development of reading skills and application of those skills to college-level material. May be repeated once to a maximum of 4 semester hours. Open by permit only.

LTRE 190. COLLEGE READING AND STUDY STRATEGIES (1 to 3). Students aided in appraising their present level of reading and learning strategies, introduced to research supported reading and study strategies to improve learning effectiveness, and provided with opportunities to apply and evaluate strategies in college course work. May be repeated to a maximum of 3 semester hours.

LTRE 201. ADVANCED COLLEGE READING (3). Refinement of college reading comprehension skills including critical and analytical reading, reading flexibility, acquisition of vocabulary, and organizational structures common to specific disciplines: business and professional studies, arts and humanities, education and social sciences, and mathematics and physical sciences.

LTRE 231. TECHNIQUES OF LITERACY TUTORING (3). Methods and techniques for literacy tutoring. Development of tutorial resource materials.

LTRE 300. ELEMENTARY SCHOOL DEVELOPMENTAL READING PROGRAMS (3). Development of effective reading programs, based on theories of children's learning and language development. PRQ: Elementary education and special education major, GPA of at least 2.75, at least sophomore standing, and successful completion of the ICTS Basic Skills Test.

LTRE 305. TEACHING READING IN THE MIDDLE SCHOOLS (3). Application of evaluation and teaching strategies for the development of reading in middle school students. Young adult literature and teaching materials for middle school reading programs. PRQ: GPA of at least 2.75.

LTRE 309. EMERGING LITERACY AND BEGINNING READING INSTRUCTION THROUGH AGE 8 (3). Examination of emerging literacy, assessment, organization for instruction, and appropriate methods of reading instruction for primary-level children.

LTRE 310. TEACHING READING IN THE SECONDARY SCHOOL (3). Foundations for and establishment of developmental and content area reading programs in secondary schools, including methods and applications for diverse learners.

LTRE 311. CONTENT AREA LITERACY INSTRUCTION (3). Developing students' literacy skills and learning strategies in the content areas, and designing and adapting content field materials, texts, teaching strategies, and assessment measures for literacy instruction.

LTRE 320. ORGANIZING FOR EFFECTIVE DIAGNOSTIC READING INSTRUCTION (3). Assessing reading achievement and organizing for diagnostic reading instruction to address individual differences. PRQ: GPA of at least 2.75 and junior standing.

LTRE 330. PRACTICUM IN READING DIAGNOSIS (3). Administration and interpretation of various formal and informal assessments. Emphasis on developing case studies and preparing case reports. PRQ: GPA of at least 2.75 and senior standing.

LTRE 331. PRACTICUM IN PROBLEMS OF TEACHING READING (3). Diagnostic techniques and clinical experience in teaching literacy strategies. PRQ: GPA of at least 2.75 and senior standing.

LTRE 350. ORGANIZING FOR EFFECTIVE ELEMENTARY READING INSTRUCTION (3). Assessing reading achievement and organizing, managing, and delivering effective instruction in a classroom setting. PRQ: LTRE 300, GPA of at least 2.75, and junior standing.

LTRE 401. PRACTICUM IN TEACHING DEVELOPMENTAL READING: ELEMENTARY LEVEL (3). Practical applications and experiences in developing diagnostic teaching techniques and strategies to improve the reading skills and meet the needs of individual pupils. PRQ: LTRE 350.

LTRE 431. TECHNIQUES OF TUTORING AND LEARNING ASSISTANCE (3). *Crosslisted as CAHA 431X.* Methods and techniques for peer tutoring, supplemental instruction, learning assistance, or literacy tutoring. Development of tutorial resource materials. Basic assessment and remedial or developmental processes in content area tutoring, study strategies, and learning assistance. Experiences with tutorial programs, learning assistance programs, or supplemental instruction groups.

LTRE 490. WORKSHOP IN EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and public schools. May be repeated when subject varies; however, no more than 6 semester hours may be applied toward the degree. PRQ: Acceptance by director of workshop.

LTRE 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Literacy Education Faculty

Norman A. Stahl, Ph.D., University of Pittsburgh, professor, chair
June E. Barnhart, Ph.D., Northwestern University, associate professor
Chris L. Carger, Ph.D., University of Illinois, Chicago, associate professor
Karen Carrier, Ph.D., University of Pennsylvania, assistant professor
Mayra C. Daniel, Ed.D., Illinois State University, assistant professor
Laurie Elish-Piper, Ph.D., University of Akron, associate professor
Francine Falk-Ross, Ph.D., University of Illinois, Chicago, associate professor
Pamela J. Farris, Ph.D., Indiana State University, Distinguished Teaching Professor
Susan L'Allier, Ed.D., Harvard University, assistant professor
Pamela Nelson, Ed.D., Northern Illinois University, assistant professor
Richard A. Orem, Ed.D., University of Georgia, professor
Donald J. Richgels, Ph.D., University of Wisconsin, Presidential Research Professor
Alfred Tatum, Ph.D., University of Illinois, Chicago, associate professor
Edyth E. Young, Ph.D., University of Illinois, assistant professor

Department of Teaching and Learning (TL--)

Admission to the major in elementary education and to the interdisciplinary major in early childhood studies is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Teaching and Learning offers the B.S. degree with an interdisciplinary major in early childhood studies, the B.S.Ed. degree with a major in elementary education and with a major in special education, and undergraduate course work in early childhood education, elementary education, middle-grades education, outdoor teacher education, secondary education, and special education. State of Illinois approved and NCATE accredited programs leading to certification are offered in early childhood education, elementary education, and special education. Viewing teaching both as an art and a science, learning as a reciprocal process, and service as a responsibility, the department provides curriculum and instruction grounded in theory, research, and best practice.

The B.S. degree in early childhood studies is offered jointly by the Department of Teaching and Learning and the School of Family, Consumer, and Nutrition Sciences.

The B.S.Ed. degree in elementary education qualifies students for an Illinois Elementary Teacher's Certificate which enables them to teach in kindergarten through ninth grade. The elementary education program is approved by the Illinois State Board of Education and is designed to help preservice teachers learn theoretical constructs and practice appropriate role functions in the classroom with children. Students may also earn middle grades endorsement by successfully completing EPS 419 and TLCI 422. Transfer students who wish to major in elementary education should plan their program of study during their scheduled orientation session with an elementary education adviser.

The B.S.Ed. degree in special education is designed for those who plan to teach students with disabilities at the elementary, intermediate, or secondary level. Completion of department and appropriate emphasis requirements leads to certification by entitlement for teaching individuals with learning disabilities, behavior disorders, developmental disabilities, physical disabilities, traumatic brain injury, and autism as a Learning Behavior Specialist I or a person holding Type 10 Standard Special certification by entitlement for teaching students with vision impairments.

As part of teacher certification, students must pass two competency examinations required by the Illinois State Board of Education, one in basic skills and one in the subject-matter knowledge that corresponds most closely to the Illinois field for which they are seeking certification (e.g., early childhood education, elementary education, special education).

Advisement services are provided the student from freshman year through graduation. Students are responsible for utilizing these services by responding to the periodic posted notices of deadlines for professional semester applications and schedules for advance registration advisement. A permit to register for the first and second professional semesters of the elementary education program must be secured from the department.

Interdisciplinary Major in Early Childhood Studies (B.S.)

The Department of Teaching and Learning and the School of Family, Consumer, and Nutrition Sciences offer a collaborative program leading to the B.S. degree with a major in early childhood studies. The program is designed to prepare personnel for professional roles serving children from birth through eight years of age and their families. This program includes the concepts, competencies, and skills required by teachers, child care workers, and other professionals involved in the education and care of young children.

The major includes two emphases: 04 certification and 04 certification with preschool special education approval. Graduates of the program qualify for Illinois Early Childhood Teacher Certification (04) enabling them to teach children from birth through grade three in Illinois public schools. Students pursuing 04 certification with preschool special education approval qualify for Illinois Preschool Special Education Approval to teach children with disabilities from three through six years of age in Illinois public school systems. The early childhood studies program is approved by the Illinois State Board of Education and the National Association for the Education of Young Children. Requirements for the emphasis in 04 certification are found in the School of Family, Consumer, and Nutrition Sciences section of this catalog.

Admission to either of the emphases in the interdisciplinary major in early childhood studies is limited. University admission does not necessarily constitute eligibility for admission into this program. Admission policies are described in the "Limited Admissions and Limited Retention Requirements" section of this catalog.

Students must be admitted to the early childhood studies program before they can enroll in any of the professional course work. To continue to enroll, students must maintain a minimum overall GPA of 2.75.

Students should carefully read the section entitled "Teacher Certification Requirements."

As part of teacher certification, students will need to pass Illinois Certification Testing System (ICTS) examinations including the basic skills test (prior to admission) and the subject matter knowledge test (prior to student teaching) in early childhood studies, as required by the Illinois State Board of Education.

Due to the comprehensive nature of the program and required course sequence, all students must plan their program of study with an early childhood studies adviser.

The major GPA in the interdisciplinary major is calculated using course work completed in the Department of Teaching and Learning and the School of Family, Consumer, and Nutrition Sciences.

Students enrolled in the interdisciplinary major as a declared major or pre-major are not permitted to count FCNS courses toward fulfilling general education requirements or to declare a minor in the School of Family, Consumer, and Nutrition Sciences.

Emphasis in 04 Certification with Preschool Special Education Approval

Students who successfully complete the program will have completed all required ISBE and NCATE standards for teacher certification.

Core Requirements (64-68)

*EPFE 201 - Education as an Agent for Change (3)
ETT 229 - Computers in Education (3), or pass the ETT proficiency examination (0)
ETT 402 - Teaching and Learning with Technology (3)
FCNS 230 - Child Development (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
*HIST 260 - American History to 1865 (3),
OR *HIST 261 - American History Since 1865 (3)
LTLA 403X/ COMD 403 - Language Development in Children (3)
LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
*PHIL 231 - Contemporary Moral Issues (3)
*PSYC 102 - Introduction to Psychology (3)
TLEC 282 - Educational Participation in Clinical Experiences: Early Childhood Education (1-2)
TLEC 382 - Practicum in Early Childhood Studies (3)
TLEC 403 - Primary Curriculum (3)
TLEC 430 - Preschool and Kindergarten Curriculum (3)
TLEC 485A - Student Teaching in Preschool-Kindergarten (6)
TLEC 485B - Student Teaching in Primary (6)
TLEE 340 - The Language Arts and Social Studies for the Primary Child (3)
TLEE 343 - Teaching Science and Mathematics to Children Ages 5-8 (3)
TLSE 240 - Introduction to Special Education (3)

Requirements in Department (21)

TLEC 300 - Observation and Assessment of Young Children (3)
TLEC 401 - Play Development of the Young Child (3)
TLEC 410 - Trends and Issues in Early Childhood Education (3)
TLEC 425 - Democracy in the Early Childhood Classroom (3)
TLSE 423 - Assessment in Early Childhood Special Education (3)
TLSE 424 - Instructional Systems for the Education of Infants, Toddlers, and Young Children with Disabilities (3)
TLSE 426 - Working with Families of Young Children with Disabilities (3)

Requirements outside Department (19)

COMD 220 - Introduction to Communicative Disorders (3)
LTIC 301 - Teaching with a Multicultural Perspective (3)
LTLA 361 - Literature for the Young Child (3)
*SOCI 250 - Contemporary Social Institutions (3),
OR *SOCI 260 - Introduction to Social Psychology (3),
OR *SOCI 270 - Social Problems (3)
One general education biology course (3-4)
Either the biology or physical science course must include a laboratory

Total Hours for Emphasis in 04 Certification with Preschool Special Education Approval: 104-108

Major in Elementary Education (B.S.Ed.)

Retention in elementary education is contingent on maintaining an NIU cumulative GPA of 2.75 or higher, having a grade of C or better in all professional education courses, and successful completion of all clinical education courses.

Students who successfully complete the program will have completed all required ISBE and NCATE standards for teacher certification.

Requirements in Department (35)

TLSE 240 - Introduction to Special Education (3)
TLEE 282 - Educational Participation in Clinical Experiences: Elementary Education (1)
TLCI 300 - The Community: An Educational Resource (3)
TLCI 340 - Elementary School Curriculum (3)
TLEE 342 - The Teaching of Social Studies in the Elementary School (3)
TLEE 344 - Teaching Science in the Elementary School (3)
TLEE 382 - Clinical Experience in Elementary School Curriculum and Instruction (1)
TLEE 383 - Elementary School Curriculum and Instruction: Field Experience (2)
TLCI 450 - Classroom Management (2)
TLSE 456 - Collaboration for Inclusive Teaching and Learning (3)
TLEE 460 - Seminar in Elementary School Student Teaching (1) (must be taken concurrently with TLCI 485)
TLEE 485 - Student Teaching (10)

Requirements outside Department (54)

ARTE 383 - Teaching Art in Elementary Schools (3)
OR MUSC 373 - Fundamentals, Principles, and Practices in Elementary Music (3)
*EPFE 201 - Education as an Agent for Change (3)
EPFE 410 - Philosophy of Education (3)
EPS 300 - Educational Psychology (3)
EPS 304 - Development of the Elementary School Child (3)
ETR 430 - Tests and Measurements (Elementary) (3)
ETT 229 - Computers in Education (3)
ETT 401A - Integrating Technology Into the Elementary Classroom (2)
ETT 401B - Field Experience for Integrating Technology Into the Elementary Classroom (1)
*HIST 260 - American History to 1865 (3)
*HIST 261 - American History Since 1865 (3)
KNPE 245 - Physical Education for Children (3)
LTLA 341 - Language Arts in the Elementary School (3)
LTLA 362 - Children's Literature in a Multicultural Society (3)
LTRE 300 - Elementary School Developmental Reading Programs (3)
LTRE 311 - Content Area Literacy Instruction (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
MATH 402 - Methods of Instruction in the Mathematics Curriculum for Elementary School (3)
*PSYC 102 - Introduction to Psychology (3)

Total Hours for a Major in Elementary Education: 89

Special Requirements

Students must receive conditional admission to teacher education prior to enrollment in TLEE 382, Clinical Experience in Elementary School Curriculum and Instruction.

Transfer students with an A.A. or A.S. degree must fulfill all general education requirements set forth by the entering catalog, in order to meet teacher certification requirements.

After 94 earned credit hours, elementary majors must complete all of their course work at NIU. No exception will be made without prior written college permission.

Elementary education students receiving a D, F, or I in any component course in the first professional semester will not be permitted to enroll in or receive credit for courses in the second professional semester until the deficiency has been removed with a grade of S, C, or better. Elementary education students receiving a D, F, U, or I in any course in the second professional semester will not be permitted to enroll or receive credit for any course in the third professional semester until the deficiency has been removed with an S, C, or better.

Major in Special Education (B.S.Ed.)

To be admitted to teacher education in special education, students must have a minimum NIU GPA of 3.00 and must have successfully completed the ICTS Test of Basic Skills. To remain

* Available for general education credit

a major in special education, students must earn a grade of C or better in TLSE 240, ETR 434, TLSE 375, TLSE 420, TLSE 435, TLSE 440, TLSE 445, TLSE 452, TLSE 454, and TLSE 455. In addition, students must earn a grade of S in the clinical courses TLSE 260, TLSE 466, and TLSE 468. Early clinical experiences in special education must equal a minimum of 100 contact hours. Students who do not meet these requirements must retake the course(s). Students are required to maintain a minimum GPA of 2.75.

Students are expected to meet all university and College of Education standards for retention. They also must meet the standards set forth in the Council for Exceptional Children Code of Ethics and Standards for Professional Practice for Special Educators.

Certification Requirements

Students who major in special education in the learning behavior specialist I emphasis or the vision impairments emphasis are required to meet the Illinois certification requirements including 29-41 semester hours of general education classes which must include 3 semester hours of cultural diversity course work. Transfer students with an A.A. or A.S. degree also must meet these requirements for teacher certification. Students who successfully complete the program requirements will have completed all required ISBE and NCATE standards for teacher certification.

Emphasis 1. Learning Behavior Specialist I

This emphasis leads to Illinois teacher certification as a learning behavior specialist I.

Requirements in Department (51)

TLSE 240 - Introduction to Special Education (3)
TLSE 260 - Service Learning Field Experience in Special Education (1)
TLSE 375 - Linking Student Characteristics to Educational Interventions (3)
TLSE 420 - Accessing the General Curriculum: Elementary I (3)
TLSE 435 - Accessing the General Curriculum: Elementary II (3)
TLSE 440 - Accessing Middle School/Secondary General Curriculum (3)
TLSE 445 - Applied Curriculum (3)
TLSE 452 - Assistive Technology/Multiple Disabilities (3)
TLSE 454 - Classroom Management for Special Educators (3)
TLSE 455 - Social/Emotional Behavior Support and Management (3)
TLSE 456 - Collaboration for Inclusive Teaching and Learning (3)
TLSE 458 - Vocational Preparation and Transition Planning for Adolescents with Disabilities (3)
TLSE 466 - Clinical Experience in Special Education I (3)
TLSE 468 - Clinical Experience in Special Education II (3)
TLSE 485A - Student Teaching in Elementary Special Education (5)
TLSE 486A - Student Teaching in Secondary Special Education (5)
TLSE 494 - Capstone Seminar in Special Education (1)

Requirements outside Department (49)

COMD 220 - Introduction to Communicative Disorders (3)
*EPFE 201 - Education as an Agent for Change (3),
OR *IDSP 211 - Educating for Cultural Sensitivity (3),
OR ILAS 123 - Cultural Pluralism in the United States (3)
EPFE 321 - History of American Education (3),
OR EPFE 410 - Philosophy of Education (3)
EPS 405 - Issues in Human Development in the Elementary Through High School Years (3)
ETR 434 - Assessing Students with Special Needs (3)
ETT 229 - Computers in Education (3)
ETT 402 - Teaching and Learning with Technology (3)
*GEOG 202 - World Regional Geography (3)
*HIST 260 - American History to 1865 (3)
*HIST 261 - American History Since 1865 (3)
KNPE 490 - Adapted Physical Education (3)
KNPE 492 - Special Physical Education Clinic Practicum (1)
LTLA 341 - Language Arts in the Elementary School (3)
LTRE 300 - Elementary School Developmental Reading Programs (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
*POLS 100 - American Government and Politics (3),
OR *POLS 150 - Democracy in America (3)
*PSYC 102 - Introduction to Psychology (3)

Other Requirements (22)

General requirements for teacher certification, in addition to *MATH 201, *PSYC 102, and *EPFE 201 or *IDSP 211 or ILAS 123.

Total Hours for Emphasis 1, Learning Behavior Specialist I: 122

Emphasis 2. Vision Impairments

Emphasis 2 leads to Illinois teacher certification in the area of blind and partially sighted.

Requirements in Department (55)

TLSE 240 - Introduction to Special Education (3)
TLEE 342 - The Teaching of Social Studies in the Elementary School (3)
TLEE 344 - Teaching Science in the Elementary School (3)
TLEE 382 - Clinical Experience in Elementary School Curriculum and Instruction (1)
TLEE 383 - Elementary School Curriculum and Instruction: Field Experience (2)
TLSE 450 - Education of Students with Visual Impairments (3)
TLSE 451 - Anatomy, Pathology, and Functioning of the Eye (3)
TLSE 470 - Literary Braille (3)
TLSE 471 - Advanced Braille (3)
TLSE 472 - Communication Systems Used By Persons with Visual Impairments (3)
TLSE 473 - Instructional Systems for Teaching Students Who Are Visually Impaired (3)
TLSE 474 - Basic Orientation and Mobility for Teachers of Persons with Visual Impairments (3)
TLSE 476 - Instructional Systems for Use of Low Vision in Educational Settings (3)
TLSE 479 - Assistive Technology for Individuals with Visual Impairments (3)
TLSE 482 - Field Experience in Special Education (4)
TLSE 485C - Student Teaching in Elementary Special Education: Vision Impairments (6)
TLSE 486C - Student Teaching in Secondary Special Education: Vision Impairments (6)

Requirements outside Department (36)

*EPFE 201 - Education as an Agent for Change (3),
OR *IDSP 211 - Educating for Cultural Sensitivity (3),
OR ILAS 123 - Cultural Pluralism in the United States (3)
EPFE 410 - Philosophy of Education (3)
EPS 300 - Educational Psychology (3)
EPS 405 - Issues in Human Development in the Elementary Through High School Years (3)
ETR 434 - Assessing Students with Special Needs (3)
LTLA 341 - Language Arts in the Elementary School (3)
LTLA 362 - Children's Literature in a Multicultural Society (3)
LTRE 300 - Elementary School Developmental Reading Programs (3)
LTRE 311 - Content Area Literacy Instruction (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
MATH 402 - Methods of Instruction in the Mathematics Curriculum for Elementary School (3)
*PSYC 102 - Introduction to Psychology (3)

* Available for general education credit

Other Requirements (32)

General requirements for teacher certification, in addition to *MATH 201, *PSYC 102, and *EPFE 201 or *IDSP 211 or ILAS 123.

Total Hours for Emphasis 2, Vision Impairments: 123

Course List

Curriculum and Instruction (TLCI)

TLCI 300. THE COMMUNITY: AN EDUCATIONAL RESOURCE (3). Study of natural and built resources available for educational purposes. Numerous field trips.

TLCI 301X. TEACHING WITH A MULTICULTURAL PERSPECTIVE (3). *Crosslisted as LTIC 301.* Examination and application of content materials focusing on cultural and linguistic diversity in the classroom and in society. Emphasis on role of teacher and school in providing information and instruction that promotes equitable and multicultural education for all students. Designed primarily for preservice teachers.

TLCI 340. ELEMENTARY SCHOOL CURRICULUM (3). Introduction to elementary school curriculum and study of the relationship of theory to practice. PRQ: Consent of department.

TLCI 422. MIDDLE SCHOOL ORGANIZATION AND INSTRUCTION (3). Development of middle school organizations and philosophy; forms of curricula; characteristics of early adolescent students; special concerns in instructional and activity planning. Fulfills middle-grade philosophy, curriculum, and instruction requirement for middle grades endorsement.

TLCI 424. METHODS AND MATERIALS IN THE SECONDARY SCHOOL (3). Modern principles of teaching and learning in relation to the guidance of learning activities in the high school class.

TLCI 450. CLASSROOM MANAGEMENT(2). *Crosslisted as EPS 450X.* Applications of motivation and management principles and procedures to maintain a positive learning environment in classrooms.

TLCI 482. CLINICAL EXPERIENCES IN OUTDOOR TEACHER EDUCATION (1 to 3). Clinical experiences in natural and built environments. May not be used in lieu of or for student teaching credit.

TLCI 483. OUTDOOR EDUCATION/LABORATORY EXPERIENCE (1). Laboratory work outside the classroom required. PRQ: TLEE 383, student teaching, and senior standing.

TLCI 490. WORKSHOP IN CURRICULUM LEADERSHIP (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of workshop.

TLCI 491. SPECIAL TOPICS IN SECONDARY EDUCATION (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

TLCI 492. SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION (1 to 3).
A. Curriculum
B. Professional Development Leadership
Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

TLCI 493. WORKSHOP IN OUTDOOR EDUCATION (1 to 3). Investigation and application of outdoor education principles to the particular needs and interests of workshop participant. May be repeated to a maximum of 3 semester hours.

TLCI 495. WORKSHOP IN SECONDARY EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of the workshop.

TLCI 497. INDEPENDENT STUDY (1 to 3).
A. Curriculum Leadership
B. Secondary Education
Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Early Childhood Education (TLEC)

TLEC 282. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: EARLY CHILDHOOD EDUCATION (1 to 2). Pre-student teaching practicum. Students required to participate a minimum of 30 clock hours per semester hour. May be repeated to a maximum of 4 semester hours. S/U grading.

TLEC 300. OBSERVATION AND ASSESSMENT OF YOUNG CHILDREN (3). Observational techniques and strategies of informal and formal developmental assessment of young children in various settings. Includes sources of information, data analyses and presentation, and referral procedures.

TLEC 382. PRACTICUM IN EARLY CHILDHOOD STUDIES (3). Participation and observation in early childhood settings for a minimum of 60 clock hours. May be repeated to a maximum of 6 semester hours. S/U grading.

TLEC 397. INDIVIDUALIZED COMPETENCY UNIT (1). Successful mastery by the student of a discrete professional competence in education, embodied in a standardized learning package, and measured by summative evaluation. Units monitored by member of the faculty. May be repeated to a maximum of 6 semester hours.

TLEC 401. PLAY DEVELOPMENT OF THE YOUNG CHILD (3). Significance of play in the development process. Examination of various aspects of play in early childhood programs.

TLEC 403. PRIMARY CURRICULUM (3). Examination of the procedures for planning, organizing, implementing, and interpreting the learning environment, curriculum, and materials for young children in primary grade classrooms.

TLEC 410. TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION (3). Focus on philosophical and psychological aspects of early childhood education as related to contemporary society.

TLEC 425. DEMOCRACY IN THE EARLY CHILDHOOD CLASSROOM (3). Democratic methods of classroom management related to young children's social learning, autonomy, and moral development. Daily scheduling in early childhood classrooms and the management of integrated and emergent curricula. Strategies for developing a diverse and unified community of learners. Professional responsibilities of teachers.

TLEC 430. PRESCHOOL AND KINDERGARTEN CURRICULUM (3). Examination of procedures for planning, organizing, implementing, and interpreting the learning environment, curriculum, and materials for young children in kindergarten and the preschool classroom.

TLEC 485A. STUDENT TEACHING IN PRESCHOOL-KINDERGARTEN (3 to 12). Student teaching for one-half semester or one entire semester in early childhood programs for children 3 years through kindergarten. Assignments to be arranged with the department. S/U grading. See "Teacher Certification Requirements." PRQ: TLEC 382.

TLEC 485B. STUDENT TEACHING IN PRIMARY (3 to 12). Student teaching for one-half semester or one entire semester in early childhood programs for children 6-8 years or in first, second, or third grades. Assignments to be arranged with the department. S/U grading. See "Teacher Certification Requirements." PRQ: TLEC 382.

TLEC 490. WORKSHOP IN EARLY CHILDHOOD EDUCATION (1 to 3). Concentrated study of curriculum, contemporary issues, and problems of the community and the public schools. May be repeated to a maximum of 6 semester hours. PRQ: Acceptance by director of the workshop.

TLEC 492. SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

* Available for general education credit

TLEC 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.

Elementary Education (TLEE)

TLEE 282. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: ELEMENTARY EDUCATION(1 to 2). *Crosslisted as EPS 282X.* Pre-student teaching practicum. Observation and analysis of curriculum, instruction, assessment, and behavior management in multicultural classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 20 clock hours per semester hour. May be repeated to a maximum of 4 semester hours. S/U grading. PRQ: Consent of the elementary education adviser.

TLEE 340. THE LANGUAGE ARTS AND SOCIAL STUDIES FOR THE PRIMARY CHILD (3). How to support language learning and learning of social studies concepts by children in the primary grades. Emphases on the developmental origins of spoken and written language competencies, on keeping the language arts curriculum integrated, and on unique aspects of the social studies curriculum for the primary grades.

TLEE 342. THE TEACHING OF SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3). Development of effective social studies programs with emphasis on instructional methods and materials.

TLEE 343. TEACHING SCIENCE AND MATHEMATICS TO CHILDREN AGES 5-8 (3). Design of science and mathematics programs with emphasis on model programs, methods and materials, problems and issues, and research findings.

TLEE 344. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3). Development of effective science programs with emphasis on instructional methods and materials.

TLEE 382. CLINICAL EXPERIENCE IN ELEMENTARY SCHOOL CURRICULUM AND INSTRUCTION (1). Pre-student-teaching practicum. Observation of classroom management and integration of technology in elementary classrooms. Design, implementation, and evaluation of lesson plans. Requires a minimum of 48 clock hours in the classroom per semester hour. S/U grading. To be taken in conjunction with professional education courses. PRQ: TLEE 282.

TLEE 383. ELEMENTARY SCHOOL CURRICULUM AND INSTRUCTION: FIELD EXPERIENCE (2). Pre-student-teaching practicum. Methodology related to practice through teaching experiences in elementary school classrooms. Requires a minimum of 48 clock hours per semester hour of professional field experience in the classroom. Design, implementation, and evaluation of lesson plans and instructional unit plans required. S/U grading. PRQ: TLEE 382. To be taken in conjunction with methods courses.

TLEE 402X. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR ELEMENTARY SCHOOL (3). *Crosslisted as MATH 402.* Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Attention given to the teaching of exceptional students and to planning for multicultural learning situations. Intended for students in education. Accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematical content course. Not open for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences major or minors. PRQ: MATH 201 with a grade of C or better and junior standing or consent of department.

TLEE 460. SEMINAR IN ELEMENTARY SCHOOL STUDENT TEACHING (1). Orientation to the teaching profession, including problems of placement, school and community participation, professional affiliations, ethics, and current issues in education. PRQ: TLEE 383, student teaching, and senior standing. CRQ: ETT 401B.

TLEE 485. STUDENT TEACHING (3 to 12). Student teaching for one-half semester or one entire semester. Assignments to be arranged with the department. S/U grading. See "Teacher Certification Requirements." PRQ: TLEE 383 and MATH 402 or TLEE 402X.

TLEE 490. WORKSHOP IN ELEMENTARY EDUCATION (1 to 6). Suggestions for experiences suitable for children 6 to 12 years old. Total time devoted to new media and the construction of teacher-made materials. May be repeated to a maximum of 6 semester hours. S/U grading.

TLEE 492. SPECIAL TOPICS IN ELEMENTARY EDUCATION (1 to 3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

TLEE 497. INDEPENDENT STUDY (1 to 3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.

Special Education (TLSE)

TLSE 240. INTRODUCTION TO SPECIAL EDUCATION (3). Educational needs of exceptional learners, including characteristics and an overview of special education programs in diverse cultural settings. For education certification only.

TLSE 260. SERVICE LEARNING FIELD EXPERIENCE IN SPECIAL EDUCATION (1). Accumulation of 30 hours of experience working with individuals with disabilities in community and/or school settings. S/U grading.

TLSE 375. LINKING STUDENT CHARACTERISTICS TO EDUCATIONAL INTERVENTIONS (3). Issues, characteristics, and educational programs for students with disabilities. Current theories, research, and practices in the field. PRQ: TLSE 240.

TLSE 420. ACCESSING THE GENERAL CURRICULUM: ELEMENTARY I (3). Curriculum, instructional methods, and materials appropriate for teaching students with mild-moderate disabilities. Focus on content in language arts and mathematics. PRQ: TLSE 375, LTLA 341, LTRE 300, and LTLA 341. CRQ: TLSE 435 and TLSE 466.

TLSE 421. TECHNOLOGY AND STUDENTS WITH DISABILITIES (3). Application of microcomputers and related technology to persons with learning, behavior, sensory, motor, and communication disorders. Software evaluation and adaptation, alternative input and output modes, development of supportive resources, and integration of microcomputing into the Individualized Education Program.

TLSE 423. ASSESSMENT IN EARLY CHILDHOOD SPECIAL EDUCATION (3). Identification and diagnosis of infants, toddlers, and young children (birth to eight years) with special needs and assessment of family concerns, priorities, and resources and early childhood environments. PRQ: TLSE 240.

TLSE 424. INSTRUCTIONAL SYSTEMS FOR THE EDUCATION OF INFANTS, TODDLERS, AND YOUNG CHILDREN WITH DISABILITIES (3). Instructional strategies and curricular models for infants, toddlers, and young children (birth to eight years) with disabilities. PRQ: TLSE 240.

TLSE 426. WORKING WITH FAMILIES OF YOUNG CHILDREN WITH DISABILITIES (3). Strategies to promote positive and productive family/professional relationships and family-centered, team-based models for working with children (birth to eight years) with disabilities and their families. PRQ: TLSE 240.

TLSE 427. ISSUES IN EARLY CHILDHOOD SPECIAL EDUCATION (1 to 3). Trends, issues, and concerns in the field of early childhood special education (birth to eight years). In-depth analysis of current issues in the field related to children with special needs and their families, service providers, and other professionals. May be repeated to a maximum of 3 semester hours. PRQ: TLSE 240.

TLSE 435. ACCESSING THE GENERAL CURRICULUM: ELEMENTARY II (3). Organization, design, and implementation of curriculum in reading for students with disabilities. Emphasis on effective practices for teaching phonemic awareness, word recognition, reading fluency, vocabulary, and reading comprehension for students with disabilities. PRQ: TLSE 375. CRQ: TLSE 420 and TLSE 466.

TLSE 440. ACCESSING MIDDLE SCHOOL/SECONDARY GENERAL CURRICULUM (3). Curricula, methods, and materials as they relate to teaching secondary-aged students with disabilities. Emphasis on instructional procedures to teach independent learning skills, curriculum and instructional adaptations, and progress-monitoring systems. PRQ: TLSE 375. CRQ: TLSE 445 and TLSE 468.

TLSE 445. APPLIED CURRICULUM (3). Methods for teaching students with moderate and severe disabilities the skills that are critical for independent functioning within a wide range of environments. Emphasis on person-centered planning, self-determination, and

collaboration with families, significant others, support staff, and related service personnel. CRQ: TLSE 440 and TLSE 468.

TLSE 450. EDUCATION OF STUDENTS WITH VISUAL IMPAIRMENTS (3). Introduction to educational programs, services, and resources for children and adolescents with visual impairments. Exploration of historical background and sociological and psychological aspects of blindness, and of legislation, literature, and philosophy related to blindness.

TLSE 451. ANATOMY, PATHOLOGY, AND FUNCTIONING OF THE EYE (3). Lectures and demonstrations of various pathologies. Includes study of parts of the eye and their function, normal visual development, abnormalities and conditions that result in visual loss, and functional and programmatic implications.

TLSE 452. ASSISTIVE TECHNOLOGY/MULTIPLE DISABILITIES (3). Evaluating abilities in relation to environmental demands and determining adaptations, adaptive equipment, and/or assistive devices that can be used to ensure student participation. Students demonstrate proficiency in programming augmentative communication devices and using other assistive technology devices. CRQ: ETT 402 and TLSE 445.

TLSE 454. CLASSROOM MANAGEMENT FOR SPECIAL EDUCATORS (3). Application of the principles of applied behavior analysis to promote appropriate academic and social behavior and to prevent and decrease challenging behavior in school settings. Designed to enable pre-service special educators to design classroom environments, conduct functional assessments, and implement group and individualized behavior programs in classroom settings. PRQ: TLSE 375.

TLSE 455. SOCIAL/EMOTIONAL BEHAVIOR SUPPORT AND MANAGEMENT (3). Organization of the classroom and school environment to facilitate management of academic and social behavior of K-12 students with emotional and behavior disorders. PRQ: TLSE 454.

TLSE 456. COLLABORATION FOR INCLUSIVE TEACHING AND LEARNING (3). Strategies to collaborate with parents and family members of students with disabilities and with school and community personnel who work with students and their families. Emphasis on recommended practices related to family-educator conferences, team meetings, consultation, team models and processes, conflict resolution and problem-solving, working with culturally and linguistically diverse families and educators, and developing positive and supportive relationships with families. Includes field-based assignments. PRQ: TLSE 240.

TLSE 457. SYSTEMS FOR INTEGRATING THE EXCEPTIONAL STUDENT IN THE REGULAR CLASSROOM (3). Designed to provide preservice and inservice secondary and vocational educators information and skills necessary to accommodate exceptional students placed in regular school settings. Establishment and implementation of Individual Educational Programs and other concerns encompassed under the Individuals with Disabilities Education Improvement Act of 2004 (Public Law 108-446) and the Regulations of Section 504 of the Rehabilitation Act of 1973. Does not count toward a degree program in special education. PRQ: Junior standing and AHPH 207 or ARTE 344 or FCNS 240 or ILAS 201 or MUSC 275.

TLSE 458. VOCATIONAL PREPARATION AND TRANSITION PLANNING FOR ADOLESCENTS WITH DISABILITIES (3). Assessment, training, and evaluation strategies to promote successful employment. Transition guidance to aid students with disabilities in making the transfer from school to adult life and adult services. PRQ: ETR 434.

TLSE 466. CLINICAL EXPERIENCE IN SPECIAL EDUCATION I (3). Pre-student-teaching clinical experience. Observation in diverse special and regular education settings where students with high-incidence disabilities receive special education services. Activities include design, implementation, and evaluation of lesson plans. S/U grading. CRQ: TLSE 420 and TLSE 435.

TLSE 468. CLINICAL EXPERIENCE IN SPECIAL EDUCATION II (3). Pre-student-teaching clinical experience. Observation and instructional practice in diverse special and/or regular education settings where students with low-incidence disabilities receive special education services. Activities include design, implementation, and evaluation of lesson plans. S/U grading. CRQ: TLSE 440 and TLSE 445.

TLSE 470. LITERARY BRAILLE (3). Mastery in the reading and writing of Grade II literary braille. Development and use of special materials; slate and stylus techniques presented.

TLSE 471. ADVANCED BRAILLE (3). Intensive study of the Nemeth Code for mathematics and science notation, music code, computer and foreign language codes, and braille textbook formats and techniques. Transcription and adaptation of print material, including tests and worksheets, for individuals who are blind. PRQ: TLSE 470.

TLSE 472. COMMUNICATION SYSTEMS USED BY PERSONS WITH VISUAL IMPAIRMENTS (3). Techniques in teaching the use of communications systems developed or adapted for individuals who are blind or visually impaired. Includes methods for teaching braille, typing, script, note-taking, sound reproduction systems, listening skills, electronic reading devices, and calculation with emphasis on abacus usage. Laboratory experiences. PRQ: TLSE 470, GPA of at least 2.50, and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test.

TLSE 473. INSTRUCTIONAL SYSTEMS FOR TEACHING STUDENTS WHO ARE VISUALLY IMPAIRED (3). Methods, materials, and techniques employed in the assessment and instruction of learners with visual impairments. Emphasis on curriculum planning and adaptation of subject matter areas. Includes preschool through high school and learners with multiple disabilities. PRQ: GPA of at least 2.50 and successful completion of the PPST/Praxis I or the ICTS Basic Skills Test.

TLSE 474. BASIC ORIENTATION AND MOBILITY FOR TEACHERS OF PERSONS WITH VISUAL IMPAIRMENTS (3). Emphasis on concept development, sensory skills, organizational techniques, pre-cane skills, and a full range of mobility options. Exploration of historical background and current issues in orientation and mobility. Includes blindfold and simulator experience.

TLSE 475. TEACHING ACTIVITIES OF DAILY LIVING TO PERSONS WITH VISUAL AND MULTIPLE DISABILITIES (3). Methods of teaching grooming, eating, and personal and home management to children, youth, and adults with visual and multiple disabilities. Two hours lecture and two hours laboratory per week. Emphasis on home, school, work, and leisure skills.

TLSE 476. INSTRUCTIONAL SYSTEMS FOR USE OF LOW VISION IN EDUCATIONAL SETTINGS (3). Procedures for assessing the functional vision of students with low vision. Instructional techniques in maximizing use of low vision, including principles of basic optics, visual development and perception, specific skills training, application of low-vision devices, and environmental modifications in educational settings. PRQ: TLSE 451.

TLSE 477. COLLABORATION AMONG SCHOOL PROFESSIONALS WORKING WITH STUDENTS WITH VISUAL AND MULTIPLE IMPAIRMENTS (3). Specific techniques related to collaborating, consulting, and team teaching within inclusive settings. Interrelationships between and among families and specialists working with students with visual and multiple impairments in the educational system.

TLSE 479. ASSISTIVE TECHNOLOGY FOR INDIVIDUALS WITH VISUAL IMPAIRMENTS (3). Includes laboratory experience with selected hardware and software. May not be repeated as TLSE 579. PRQ: TLSE 470.

TLSE 482. FIELD EXPERIENCE IN SPECIAL EDUCATION (4). Experience with students with disabilities in diverse settings involving tutoring and the use of formal and informal measures for the assessment of learning difficulties. PRQ: Consent of department.

TLSE 485. STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION (3 to 18).
A. Learning Behavior Specialist I
C. Vision Impairments
Supervised student teaching of exceptional learners in diverse cultural and educational settings. All students must satisfy the regulations

governing student teaching. May be repeated to a maximum of 18 semester hours for students seeking more than one certification. PRQ: Completion of professional education and related course work.

TLSE 486. STUDENT TEACHING IN SECONDARY SPECIAL EDUCATION (3 to 18).
A. Learning Behavior Specialist I
C. Vision Impairments
Supervised student teaching of exceptional adolescents in public school or special institution settings with diverse populations at the secondary level. All students must satisfy the regulations governing student teaching. May be repeated to a maximum of 18 semester hours for students seeking more than one certification. PRQ: Completion of professional education and related course work.

TLSE 490. WORKSHOP IN SPECIAL EDUCATION (1 to 3). Investigation and application of special education principles to the particular needs and interests of the workshop participant. May be repeated to a maximum of 6 semester hours.

TLSE 494. CAPSTONE SEMINAR IN SPECIAL EDUCATION (1). Investigation of specific areas of special education including current issues and research. Completion of professional portfolio as documentation that all required standards have been met. Designed to be taken during the same semester as student teaching. PRQ: Senior standing.

TLSE 497. INDEPENDENT STUDY (1 to 6). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.

Teaching and Learning Faculty

Nina G. Dorsch, Ph.D., Miami University, associate professor, chair
Gail Adams, Ed.D., Northern Illinois University, assistant professor
Edward Cancio, Ph.D., Utah State University, assistant professor
Lynette K. Chandler, Ph.D., University of Kansas, professor
Karen B. Cole, Ed.D., Northern Illinois University, associate professor
Gregory Conderman, Ed.D., University of Northern Colorado, associate professor
Sabiha Daudi, Ph.D., Ohio State University, assistant professor
Maylan Dunn, Ph.D., University of Oklahoma, assistant professor
Sharon M. Freagon, Ph.D., University of Wisconsin, professor
Antoinette Heinze, Ed.D., University of Southern Mississippi, associate professor
Mary Beth Henning, Ph.D., Pennsylvania State University, assistant professor
Diane H. Jackman, Ph.D., University of Minnesota, associate professor
Jesse W. Johnson, Ed.D., Northern Illinois University, associate professor
Gaylen G. Kapperman, Ed.D., University of Northern Colorado, professor
Joyce Lieberman, Ed.D., George Washington University, assistant professor
Dennis D. Munk, Ed.D., Northern Illinois University, associate professor
Moses Mutuku, Ed.D., Indiana University of Pennsylvania, assistant professor
Carla C. Shaw, Ph.D., Southern Illinois University, associate professor
Eui-Kyung Shin, Ph.D., University of South Carolina, assistant professor
Deborah A. Simmons, Ph.D., University of Michigan, professor
Christine K. Sorensen, Ph.D., Iowa State University, associate professor
Valerie Talsma, Ph.D., University of Michigan, assistant professor
Toni VanLaarhoven, Ed.D., Northern Illinois University, assistant professor
Elizabeth Wilkins, Ph.D., Southern Illinois University, associate professor
Randi B. Wolfe, Ph.D., Northwestern University, associate professor
C. Sheldon Woods, Ph.D., Kansas State University, assistant professor

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College of Engineering and Engineering Technology

Promod Vohra, Ed.D., P.E., dean
Mansour Tahernezhadi, Ph.D., P.E., acting associate dean

The departments of the College of Engineering and Engineering Technology offer baccalaureate programs leading to the degree Bachelor of Science (B.S.). The College of Engineering and Engineering Technology offers a contract major leading to a B.S. degree or the degree Bachelor of General Studies (B.G.S.). The college also participates in the interdisciplinary minor in environmental management systems (see "Interdisciplinary Minors" in the College of Liberal Arts and Sciences).

The College of Engineering and Engineering Technology shares the university's commitment to the transmission, expansion, and application of knowledge through teaching, research, and public service. The college takes as its particular responsibility the development and delivery of excellent upper-division programs in mainline engineering and technology fields applicable to the region's current and potential industrial mix.

The offerings in the College of Engineering and Engineering Technology prepare students for entry into and advancement within specialized career and professional fields as well as provide undergraduate academic programs of study. The undergraduate programs in electrical engineering, industrial engineering, and mechanical engineering are accredited by the Accreditation Board for Engineering and Technology (ABET). The technology programs are developed as appropriate according to ABET or National Association of Industrial Technology criteria.

Department Names and Undergraduate Programs Offered

Department of Electrical Engineering
B.S. in electrical engineering

Department of Industrial and Systems Engineering
B.S. in industrial and systems engineering

Department of Mechanical Engineering
B.S. in mechanical engineering

Department of Technology
B.S. in technology

Mission

The College of Engineering and Engineering Technology has an unwavering commitment to educating and training the diverse northern Illinois community through the highest level of academic and public service programs readily accessible to students, industries and citizens.

Academic Advising

The office of the associate dean assists students in interpreting university and college policies and requirements. At the department level, faculty advisers assist students in establishing academic goals and in course selection.

Special General Education Requirements for Electrical, Industrial, and Mechanical Engineering Majors

All candidates for the B.S. degree in electrical, industrial, and mechanical engineering must fulfill the university's general education requirements (see "University Graduation Requirements") as well as the requirements described under "Special Requirements for the B.S. Degree in Electrical, Industrial, and Mechanical Engineering." Although transfer students with the A.A. or A.S. degree may already have completed the university's general education requirements as discussed in "Admission" in this catalog, their course work must include a minimum of 18 semester hours in humanities, arts, social sciences, and interdisciplinary areas.

Contract Major

Requirements for the B.S. Contract Major

A student may formulate a proposal for a major program of study, appropriate to the College of Engineering and Engineering Technology, which differs substantially from existing major programs but utilizes existing courses. The student must select a faculty sponsor from the college's faculty and formulate the proposal in consultation with this sponsor. The program must be logically structured around a meaningful and interesting theme or topic, for example, noise control technology. Students desiring to build programs of this kind using a core of courses offered by other colleges should consult with those colleges. An example of such a program would be a contract major in scientific illustration, based in the School of Art's B.F.A. emphasis in illustration and coupled with a considerable amount of course work from the Department of Biological Sciences. Students desiring programs involving a substantial amount of course work in colleges other than the College of Engineering and Engineering Technology will be required to secure a cosponsor from the discipline housing such course work. Program proposals must be submitted to the associate dean of the college and must be approved by the college's Contract Major Committee.

The student who wishes to propose a contract major must

- have a cumulative GPA of at least 2.50.
- justify the new curriculum and define the goal to be achieved.
- design a multidisciplinary program that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects on or off campus, but no more than 12 semester hours of course work for these kinds of activities will be permitted in the contract.)
- include in the program at least 50 semester hours of credit in courses basic to the area of study. These 50 semester hours
  - may not be used to fulfill general education requirements.
  - must include at least 15 semester hours of course work offered by the College of Engineering and Engineering Technology.
  - must include at least 30 semester hours of course work at the 300-400 level.
  - must not include more than 24 semester hours from the offerings of a single department.

A student who completes an approved contract major and all other graduation requirements will receive the Bachelor of Science degree with a contract major in _____ (the theme specified in the contract).

Requirements for the B.G.S. Contract Major

The College of Engineering and Engineering Technology offers students the opportunity of constructing individualized programs of study which are different from the university's regular major and minor programs. Such an individualized program of study, termed a contract major, utilizes existing university courses and leads to the degree Bachelor of General Studies (B.G.S.). To receive the degree, a student must satisfy all university graduation requirements. The requirement of the contract major replaces the requirement of a regular departmental major. (See "Other Graduation Requirements.")

Contract major programs are offered by other colleges in the university. The student interested in pursuing a contract major should discuss the matter with an adviser in the college offering the majority of the academic work proposed for inclusion in the program.

The contract major program allows a student who has at least junior classification and unusual and well defined academic interests to design a major with the advice of a faculty sponsor. The program must be logically structured around a meaningful and interesting theme or topic, for example, noise control technology. Program proposals must be submitted to the associate dean of the college and must be approved by the college's Contract Major Committee.

The student who wishes to earn a degree through the general program must

- have a cumulative GPA of at least 2.50.
- justify the new curriculum and define the goal to be achieved.
- design a multidisciplinary program that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects on or off campus, but no more than 12 semester hours of course work for these kinds of activities will be permitted in the contract.)
- include in the program at least 50 semester hours of credit in courses basic to the area of concentration. These 50 semester hours
  - may not be used to fulfill general education requirements.
  - must include at least 15 semester hours of course work offered by the College of Liberal Arts and Sciences.
  - must include at least 30 semester hours of course work at the 300-400 level.
  - must not include more than 24 semester hours from the offerings of a single department.

A student who completes an approved contract major and all other graduation requirements will receive the degree Bachelor of General Studies with a contract major in _____ (the theme specified in the contract).

NOTE: The degree Bachelor of General Studies is not as well understood outside the university as traditional baccalaureate degrees. Students earning this degree may be required to convince prospective employers or graduate schools that the degree will enable them to succeed in a particular job or a future educational endeavor.

Interdisciplinary Courses Offered by the College of Engineering and Engineering technology (IEET, UEET)

IEET 490. TOPICS IN ENGINEERING AND ENGINEERING TECHNOLOGY (1 to 3). Selected interdisciplinary topics from various engineering or engineering technology disciplines not offered in regular departmental courses. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

UEET 101. INTRODUCTION TO ENGINEERING (1). Introduction to engineering disciplines and careers, role of the engineer in society, engineering approach to problem-solving, engineering design process, concurrent engineering, and engineering ethics. Required course for all engineering majors; should be taken during the first year of enrollment at NIU. Lecture and laboratory; one 2-hour period per week.

UEET 102. ENGINEERING CONNECTION SEMINAR I (1). A broad and contemporary coverage on interdisciplinary nature of engineering design. Team projects are required. PRQ: UEET 101.

UEET 103. ENGINEERING CONNECTION SEMINAR II (1). A broad and contemporary coverage on interdisciplinary nature of engineering design. Emphasis is placed on quantitative investigation. Team projects are required. PRQ: UEET 102.

UEET 104. ENGINEERING CONNECTION SEMINAR III (1). A broad and contemporary coverage on interdisciplinary nature of engineering design and problem formulation. Computer simulation is integrated to the course contents. Team projects are required. PRQ: UEET 103.

Department of Electrical Engineering (ELE)

The Department of Electrical Engineering offers a B.S. in electrical engineering which will equip students with basic competence and job skills needed to design, develop, and operate systems which generate and use electronic signals. These technologies include machinery, electronics, communications, and computers.

As a profession, electrical engineering demands the individual to work with others in supporting disciplines to achieve common goals. Design is central to the profession and is integrated throughout the curriculum. The design experience is supported by concepts related to reliability, maintainability, and product value. The student is encouraged to approach central technical issues with increased awareness of logistical, ethical, and social implications. Respect for the safety of persons and property is integral to the electrical engineering curriculum.

Mission

The mission of the Department of Electrical Engineering is to join the university in its commitment to the transmission, expansion, and application of knowledge through teaching, research, and public service. In this commitment, the department features close interaction with area industries and fosters an ongoing exchange of ideas to benefit its students, alumni, and the community at large.

Electrical Engineering Program Educational Objectives

As individual and as members of a team, our graduates will be able to demonstrate the ability to formulate, analyze, and solve electrical engineering problems and ensure the ability to handle current, as well as, future engineering issues; demonstrate the ability to apply the design process to engineering problems; communicate effectively with those inside and outside of electrical engineering; and exhibit social and professional responsibility in global context.

Department Requirements

Candidates for the Bachelor of Science degree in electrical engineering must select their general education courses in the humanities and the arts, social sciences, and interdisciplinary studies to satisfy both university and the accrediting agency (Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology) requirements. These requirements are described under "Special General Education Requirements for Electrical, Industrial, and Mechanical Engineering Majors" in the College of Engineering and Engineering Technology section of this catalog. Students must consult with their faculty advisers to determine appropriate courses.

All electrical engineering students must have their schedule reviewed, approved, and signed by their faculty adviser each semester. Any deviation from an approved course schedule may delay graduation.

Major in Electrical Engineering (B.S.)

Requirements in Department (41)

ELE 210 - Engineering Circuit Analysis (3)
ELE 210U - Engineering Circuit Laboratory Project (1)
ELE 250 - Computer Engineering I (4)
ELE 315 - Signals and Systems (3)
ELE 330 - Electronic Circuits (4)
ELE 335 - Theory of Semiconductor Devices I (3)
ELE 340 - Electrical Power Systems (4)
ELE 356 - Computer Engineering II (4)
ELE 360 - Communications Systems (4)
ELE 370 - Engineering Electromagnetics (3)
ELE 380 - Control Systems I (4),
OR MEE 322 - Dynamic Systems and Control I (3)
ELE 491 - Electrical Engineering Design Proposal (1)
ELE 492 - Electrical Engineering Design Project (3)

Requirements outside Department (47)

*CHEM 210T - General Chemistry I (3)
*CHEM 212 - General Chemistry Laboratory I (1)
CSCI 240 - Computer Programming in C++ (4)
ISYE 220 - Engineering Economy (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 336 - Ordinary Differential Equations (3)
MEE 210 - Engineering Mechanics I (3)
MEE 211 - Engineering Mechanics II (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
PHYS 283 - Fundamentals of Physics III: Quantum Physics (3)
STAT 350 - Introduction to Probability and Statistics (3),
OR ISYE 335 - Statistics for Engineering (3)
UEET 101 - Introduction to Engineering (1)

Electives (18)

Electives may be any ELE course numbered 400 or higher with the exception of ELE 491, ELE 492, and ELE 497. With the approval of the Department of Electrical Engineering, other mathematics, sciences, or engineering courses may be used as electives. At least 12 of these 18 semester hours must be from the Department of Electrical Engineering, and a minimum of two courses must be selected from one of the following four areas.

Microelectronics/Biomedical: ELE 421, ELE 430, ELE 431, ELE 432, ELE 433, ELE 434, ELE 435, ELE 436, ELE 437, ELE 438
Power/Controls: ELE 440, ELE 441, ELE 480, ELE 481
Digital/Communications: ELE 451, ELE 452, ELE 454, ELE 455, ELE 456, ELE 457, ELE 461, ELE 464
Electromagnetics: ELE 470, ELE 474, ELE 475, ELE 477

Total Hours for a Major in Electrical Engineering: 106

Course List

100. ELEMENTS OF ELECTRONICS (3). Basic principles used to explain the operation of electrical and electronic devices such as radios, stereos, televisions, radars, computers, microwave ovens, and other common electronic equipment.

210. ENGINEERING CIRCUIT ANALYSIS (3). Properties of electric circuit elements, Ohm's and Kirchhoff's laws; node and loop equations; AC sources and impedance; time domain transient and

*Available for general education credit.

frequency domain; and steady state analysis. Three lectures and one recitation per week. PRQ: MATH 230 and PHYS 273 with a grade of C or better.

210U. ENGINEERING CIRCUIT LABORATORY PROJECT (1). Laboratory to design and build electrical circuit projects. Team project must be designed and implemented by the end of the semester. Meets two hours a week. PRQ: ELE 250. CRQ: ELE 210.

215. ELECTRONIC INSTRUMENTATION (3). Concepts and principles of analog and digital transducers, amplifiers, and instrumentation. Emphasis on use of electronic laboratory equipment and experimental instrumentation. Not available for credit to electrical engineering majors. Two one-hour lectures and one two-hour laboratory per week. PRQ: ELE 210.

250. COMPUTER ENGINEERING I (4). Design of digital circuits using SSI, LSI, and VLSI components. Combinational design techniques as well as sequential design techniques presented with the use of Boolean algebra, map method, tabulation method, and state transition diagrams. Lecture, discussion three periods per week; laboratory, problem session two periods per week. PRQ: MATH 155.

315. SIGNALS AND SYSTEMS (3). Analysis of RLC circuits with applications to filters; Bode Plot; Fourier transforms, Laplace transforms, introduction to discrete time systems; 2-port network. PRQ: ELE 210 with a grade of C or better and MATH 336.

330. ELECTRONIC CIRCUITS (4). Unified treatment of the applications of semiconductor devices, including p-n junctions, bipolar transistors, and field effect devices. Topics include device modeling, biasing, input impedance, output impedance, voltage gain, current gain, and power gain and Op.Amp. Design and analysis of single and multiple stage amplifiers. Lecture, discussion three periods per week; laboratory session two periods per week. PRQ: ELE 210U and MATH 336.

335. THEORY OF SEMICONDUCTOR DEVICES I (3). Unified treatment of the theory of operation of semiconductor devices, including p-n junctions, bipolar transistors, and field effect transistors. Topics include doping, band gap, mobility, carrier lifetime, photolithographic techniques, passivation, chemical etching, metallization, and device testing. PRQ: CHEM 210T and CHEM 212 with a grade of C or better, ELE 210, and PHYS 283.

340. ELECTRICAL POWER SYSTEMS (4). Study of the fundamentals of magnetic circuits and Faraday's law to create electrical or mechanical energy. Study of transformers, mutual inductance, 3-phase power systems, induction motors, synchronous machines, and DC machines, with emphasis on the applications in engineering practice. Lecture, discussion three periods per week; laboratory, problem session two periods per week. PRQ: ELE 210 with a grade of C or better and PHYS 273.

356. COMPUTER ENGINEERING II (4). Analysis of microprocessors with emphasis on architecture, bus cycle, internal registers, addressing modes, and instruction sets. Memory and I/O interface techniques. Lecture, discussion three periods per week; laboratory, problem session two periods per week. PRQ: ELE 250.

360. COMMUNICATIONS SYSTEMS (4). Introduction to communication system analysis. Analysis and design of radio frequency electronic circuits; building blocks of radio transmitters and receivers; circuit conditions required to produce oscillation, frequency translation, modulation, and detection. Introduction to phase locked-loop circuit design. Lecture, discussion three periods per week; laboratory, problem session two periods per week. PRQ: ELE 315, ELE 330, and IENG 335 or STAT 350.

370. ENGINEERING ELECTROMAGNETICS (3). Fundamentals of electromagnetic field theory; concepts of force, energy, potential, capacitance, and inductance in electromagnetic fields; analytical and experimental solutions of Laplace's equation; Maxwell's equations in differential and integral form. PRQ: ELE 210, MATH 232, and MATH 336.

380. CONTROL SYSTEMS I (4). Control system modeling for electromechanical systems using block diagram, flow chart, flow graphs, and derivation of transfer function using Laplace transforms. Time and frequency domain analysis and controller design using root-locus, Routh- Hurwitz stability method, and Bode Plots. Software for control system used as an aid in the control system analysis and design process. PRQ: ELE 315 and ELE 330 or ELE 215 and MEE 321.

421. BIOMEDICAL SENSOR ENGINEERING (3). Theory, analysis, and design of biomedical sensors. Topics include biological elements; immobilization of biological components; medical, biological, and chemical sensors; and transducers based on electrochemistry, optics, and solidstate devices. PRQ: Grade of C or better in CHEM 210T and CHEM 212, ELE 215, ELE 330, ELE 335, and PHYS 273; or consent of department.

430. DESIGN WITH FIELD PROGRAMMABLE LOGIC DEVICES (3). Design of high performance logic designs utilizing programmable logic gates. Design of finite state machines and introduction to latest computer-aided tools. PRQ: ELE 250 or consent of department.

431. THEORY OF SEMICONDUCTOR DEVICES II (3). Continuation of ELE 335 dealing with complex semiconductor devices. Theory of operation of integrated circuits, solid state lasers, switching devices, and negative conductance microwave devices. PRQ: ELE 335.

432. SEMICONDUCTOR DEVICE FABRICATION LABORATORY (3). Design and fabrication of active semiconductor devices. Laboratory exercises include artwork and pattern generation, mask making, oxidation, photolithographic processing, diffusion, metallization, and device testing. PRQ: ELE 335 or consent of department.

433. DESIGN OF GALLIUM ARSENIDE INTEGRATED CIRCUITS (3). Fundamentals of GaAs devices and logic families; fabrication processes; physical layout for VLSI circuits; interconnection and testing of high speed systems. PRQ: ELE 335.

434. SEMICONDUCTOR MATERIAL AND DEVICE CHARACTERIZATION (3). Study of fundamentals and principles of semiconductor material properties with applications to device characterization. Modern measurement techniques of semiconductor industry including electrical, optical, chemical, and physical methods. PRQ: ELE 335 or consent of department.

435. INTEGRATED CIRCUIT ENGINEERING (3). Basic theory of integrated circuits including MOS processing technology. Principles of layout design, simulation, and design rule checking of large-scale integrated circuits. Introduction to design tools and techniques including utilization of available design software packages. Requirements include the design, simulation and layout of an integrated circuit to the point of mask generation. PRQ: ELE 250 and ELE 330.

436. ANALOG MOS VLSI ENGINEERING (3). Introduction to analog MOS (nMOS and CMOS) circuits. MOS transistor as both a switch and a linear device. Different MOS circuits such as amplifiers, switches, comparators, sensors, D/A-A/D converters, multipliers, and neural networks are investigated. PRQ: ELE 330 or consent of department.

437. HYBRID CIRCUIT DESIGN (3). Lecture/laboratory course covering thick film processing techniques as they apply to the design and fabrication of miniature electronic circuits. Topics include minimum design rules, design of electronic components, artwork generation, screen preparation, screen printing, drying and firing profiles, and trimming. PRQ: ELE 360.

438. THIN FILM ENGINEERING (3). Lecture/laboratory course designed to demonstrate theory and principles of thin film processing including vacuum processing and deposition techniques. Topics include resistive evaporation, DC sputtering, RF sputtering, ion beam sputtering, electron beam evaporation, methods of achieving vacuum, and measurement techniques. PRQ: ELE 335.

440. POWER ELECTRONICS (3). Introduction to concepts involved with switch mode power electronic circuits. Analysis of basic circuit topologies including AC/DC, DC/DC, and DC/AC converters. Discussion of the desired outputs of these circuits as well as undesired components such as harmonies and ripple. PRQ: ELE 330 and ELE 340.

441. ELECTRIC DRIVES (3). Advanced discussion of different types of electric motors under various load conditions. Application of power electronic drives to electric motors. Topics include DC drives, AC induction motor drive, and AC synchronous motor drives. Efficiency and harmonic effects discussed for each drive system. PRQ: ELE 330 and ELE 340.

450. DIGITAL DESIGN WITH HDL (3). Design, simulation, and synthesis of digital circuits and systems using Verilog HDL or VHDL. Topics include digital design methodologies, finite state automata, behavioral models, structural design, finite state machines and datapath controllers, and algorithms and architectures for digital signal

processors. Includes term project to design, simulate, and synthesize a digital circuit/system. PRQ: ELE 250 and CSCI 240, or consent of department.

451. DIGITAL FILTER DESIGN (3). Difference equations, z-transform, Fourier representation of sequences, discrete-time system transfer functions, and infinite impulse response discrete-time filters design. Includes implementation considerations and computer aided filter design. Practical examples and computer simulations. PRQ: ELE 315.

452. REAL-TIME DIGITAL SIGNAL PROCESSING (3). In-depth presentation of the use of single-chip programmable signal processors. Hardware design aspects of digital signal processing (DSP) systems, architectural issues, and fixed versus floating pointing representations for implementing DSP algorithms. Applications to speech processing, adaptive filtering, and telecommunications. PRQ: ELE 356 and ELE 451, or consent of department.

454. INTRODUCTION TO DIGITAL IMAGE PROCESSING (3). Principles, techniques, and algorithms for enhancements of degraded images, compression of pictorial information, recognition of patterns in scenes, reconstruction of a picture from projections, and descriptions of objects in a scene. PRQ: Senior standing, CSCI 240, and consent of department.

455. COMPUTER SYSTEM ARCHITECTURE (3). Register transfer and micro-operation, basic computer organization and design; central processing unit; micro-programmed control; pipeline and vector processing; computer arithmetic; input/output organization, and memory organization. PRQ: ELE 250.

456. INTRODUCTION TO PATTERN RECOGNITION (3). Theory and design of pattern recognition systems. Topics include pattern recognition and perception, non-parametric decision theoretical classification, statistical discriminant functions, Fisher's approach, unsupervised learning systems (clustering) and their performance, and neural networks for pattern recognition. PRQ: CSCI 240 or CSCI 241, ELE 350, and STAT 350 or IENG 335, or consent of department.

457. MICROPROCESSOR (3). Analysis of computer logic systems. Topics include parallel and serial I/O ports; memory interface, I/O interface, and interrupt interface. PRQ: ELE 356.

461. SYNTHESIS OF ACTIVE AND PASSIVE FILTERS (3). Principles of network synthesis are introduced. Synthesis techniques are used to design active and passive filters. PRQ: ELE 360.

464. SYSTEM DESIGN UTILIZING ANALOG INTEGRATED CIRCUITS (3). Basic theory for the utilization of special purpose integrated circuit amplifiers in application specific to circuit designs, including special differential and operational amplifier circuits. PRQ: ELE 330.

470. MICROWAVE CIRCUITS AND DEVICES (3). Wave equation; microwave waveguides and components; solid-state devices and circuits; microwave integrated circuits; microwave test equipment and laboratory measurements. PRQ: ELE 370.

471. LIGHTWAVE ENGINEERING (3). Theory, analysis, and design of opto electronic communication techniques. Multi-mode and mono-mode optical fibers examined for loss, dispersion, and practical considerations. Optical receiver, transmitter, and repeaters presented with an introduction to optical signal processing. PRQ: ELE 335, ELE 360, and ELE 370, or consent of department.

474. TRANSMISSION LINE MEDIA AND WAVE PROPAGATION (3). Theory and applications of various transmission line media such as two-wire, coaxial, stripline, and microstrip lines. Principles of wave propagation in freespace and waveguides. Distributed circuits and impedance matching using the Smith chart approach. PRQ: ELE 370.

475. ANTENNA THEORY AND DESIGN (3). Fundamentals of electromagnetic radiation from wire and aperture-type antennas; applications of field equivalence principles to aperture radiation; receiving antennas and noise evaluation of communication systems; antenna test equipment and measurement techniques. PRQ: ELE 370.

477. ADVANCED MICROWAVE AND MILLIMETER WAVE ENGINEERING (4). Analysis of various transmission-line media, including rectangular and circular waveguides, dielectric waveguides, finlines, and microstrip transmission lines; microwave/millimeter wave passive and active components; theory and design of integrated circuits, such as receiver front-ends; application of microwave systems and measurement techniques. PRQ: ELE 370.

480. CONTROL SYSTEMS II (3). Design and compensation of feedback control systems. State-variable approach to the analysis and design of feedback control systems. Use of digital controllers in modern control systems. PRQ: ELE 380 or MEE 322.

481. DIGITAL CONTROL SYSTEMS (3). Introduction to digital and sampled-data control systems. Analysis and design of digital systems using z-transform and state-space methods. Study of the effects of quantization and sampling upon stability and performance. PRQ: ELE 480.

491. ELECTRICAL ENGINEERING DESIGN PROPOSAL (1). Discussion of educational programs, career opportunities, and modern topics in electrical engineering. Select and write proposal for senior design project. For electrical engineering students only. Team project required. PRQ: Consent of department.

492. ELECTRICAL ENGINEERING DESIGN PROJECT (3). Students use their engineering design concepts and analytical and computer tools, in conjunction with their own ingenuity, to create a new solution to a specified engineering design problem. Team project required. PRQ: ELE 491.

497. INDEPENDENT STUDY (1 to 3). Independent pursuit of problems in electrical engineering under faculty supervision. Written report required. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

498. SPECIAL TOPICS (1 to 3). Regularly scheduled courses in advanced topics in electrical engineering. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.
A. Biomedical Engineering
B. Microelectronics
C. Power Electronics
D. Computer Engineering
E. Communications Engineering
G. Electromagnetics
J. Control Systems
K. Digital Signal Processing

499H. HONORS UNDERGRADUATE RESEARCH (1 to 3). Pursuit of an undergraduate research topic in electrical engineering under faculty supervision. Written report required. May be repeated to a maximum of 3 semester hours over two or three semesters. PRQ: Consent of department.

Electrical Engineering Faculty

Sen-Maw Kuo, Ph.D., University of New Mexico, professor, chair
Ibrahim Abdel-Motaleb, Ph.D., P.E., University of British Columbia, professor
Alan P. Genis, Ph.D., Colorado State University, professor
Michael Haji-Sheikh, Ph.D., University of Texas, Arlington, assistant professor
Reza Hashemian, Ph.D., P.E., University of Wisconsin, professor
Vincent McGinn, Ph.D., P.E., Pennsylvania State University, professor
Laura L. McPheters, Ph.D., Georgia Institute of Technology, assistant professor
Gerald Miller, Ph.D., Northwestern University, professor
Mansour Tahernezhadi, Ph.D., P.E., University of Oklahoma, professor
Peng-Yung Woo, Ph.D., University of Pennsylvania, professor
Donald Zinger, Ph.D., P.E., University of Wisconsin, associate professor

Department of Industrial and Systems Engineering (ISYE)

The Department of Industrial and Systems Engineering offers a B.S. in industrial and systems engineering and also an integrated B.S./M.S. sequence in industrial and systems engineering. The department provides access to a variety of courses and facilities, a faculty with diverse industrial experience, and a program which emphasizes practical applications as well as theoretical developments.

Industrial and systems engineering is concerned with the design, installation, management, operation, and improvement of systems that produce goods and services. It follows an integrated approach that considers the entire life cycle of the product or service produced, from design through production, delivery, and customer support. Industrial and systems engineers are involved in such functions as designing a complete production facility or a single workplace, setting operator performance standards, planning manufacturing processes, planning and controlling production, designing quality control systems, analyzing system reliability, simulating system performance, and planning and evaluating large-scale projects. Industrial and systems engineers are employed in a broad variety of organizations, including manufacturing industries, utilities, transportation, health care systems, financial institutions, and all levels of government agencies.

Mission

The mission of the Department of Industrial and Systems Engineering is to achieve excellence in teaching, conducting research and preparing engineering professionals.

Educational Objectives

The department's undergraduate program provides students with the knowledge, skills, and tools to model people-technology systems using the techniques of mathematics, science, and engineering; to design potential solutions to problems and evaluate the consequences of their solutions in the broader context of the organization, society, and the environment; to communicate effectively the benefits of their proposed solutions using written, oral, and electronic media; to function effectively and provide leadership within an organization as a professional and ethical member of society, including the ability to facilitate and participate in multi-disciplinary teams; and to initiate and complete self-directed learning for professional and personal development especially with respect to contemporary issues.

Program Outcomes

The department's undergraduate program is designed to provide graduates with the ability to apply knowledge of mathematics, science, and engineering; the ability to design and conduct experiments, as well as analyze and interpret data; the ability to design a system, component, or process to meet design needs; the ability to function on multi-disciplinary teams; the ability to identify, formulate, and solve engineering problems; an understanding of professional and ethical responsibility; the ability to communicate effectively; a broad education necessary to understand the impact of engineering solutions in a global and social context; a recognition of the need for, and an ability to engage in, lifelong learning; a knowledge of contemporary issues; and the ability to use the techniques, skills, and the modern engineering tools necessary for engineering practice.

Department Requirements

Candidates for the Bachelor of Science degree in industrial and systems engineering must select their general education courses in the humanities and the arts, social sciences, and interdisciplinary studies to satisfy college requirements. Students should consult with their faculty advisers to determine appropriate course schedules.

Major in Industrial and Systems Engineering (B.S.)

Requirements in Department (43)

ISYE 210 - Integrated Systems for Industry (3)
ISYE 310 - Work Measurement and Work Design (3)
ISYE 334 - Probability for Engineering (3)
ISYE 335 - Statistics for Engineering (3)
ISYE 350 - Principles of Manufacturing Processes (3)
ISYE 370 - Operations Research: Deterministic Models (3)
ISYE 371 - Operations Research: Probabilistic Models (3)
ISYE 410 - Human Factors Engineering (3)
ISYE 430T - Quality Control (3)
ISYE 440 - Production Planning and Control (3)
ISYE 450 - Integrated Manufacturing Systems (3)
ISYE 460 - Facilities Planning and Design (3)
ISYE 480 - Simulation Modeling and Analysis (3)
ISYE 495 - Senior Design Project (4)

Requirements outside Department (50)

*CHEM 210T - General Chemistry I (3)
*CHEM 212 - General Chemistry Laboratory I (1)
CSCI 240 - Computer Programming in C++ (4)
*ECON 260 - Principles of Microeconomics (3)
ELE 210 - Engineering Circuit Analysis (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 336 - Ordinary Differential Equations (3)
MEE 210 - Engineering Mechanics I (3)
MEE 211 - Engineering Mechanics II (3)
MEE 270 - Engineering Graphics (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
*PSYC 102 - Introduction to Psychology (3)
UEET 101 - Introduction to Engineering (1)

Technical Courses (15)

Course work from the following, including at least 9 semester hours of ISYE course work (15).[1]

ACCY 206 - Introductory Financial Accounting (3)
ACCY 207 - Introductory Cost Management (3)
ACCY 288 - Fundamentals of Accounting (3)
BIOS 311 - Functional Human Anatomy (4)
ELE 215 - Electronic Instrumentation (3)
MATH 240 - Linear Algebra and Applications (4)
MATH 339 - Engineering Mathematics I (3)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 380 - Elementary Combinatorics (3)
MATH 434 - Numerical Linear Algebra (3)
MATH 435 - Numerical Analysis (3)
MGMT 333 - Principles of Management (3)
OMIS 351 - Information Systems in Organizations (3)

*Available for general education credit.

[1] Other courses not shown in this list may be chosen with the consent of the Department of Industrial and Systems Engineering.

OMIS 442 - Quality Management (3)
PSYC 345 - Cognitive Psychology (3)
STAT 470 - Introduction to Probability Theory (3)
STAT 473 - Statistical Methods and Models I (3)
STAT 473A - Statistical Computing Packages (1)
STAT 474 - Statistical Methods and Models II (3)
STAT 478 - Statistical Methods of Forecasting (3)
Any 300- or 400-level course in electrical engineering, industrial engineering, or mechanical engineering offered in the College of Engineering and Engineering Technology with the exceptions of MEE 330, and MEE 331, and required courses.

Total Hours for a Major in Industrial and Systems Engineering: 108

Emphasis in Manufacturing Systems

Requirements in Department (39)
Same as required for major except ISYE 495 is not required.

Requirements outside Department (50)
Same as required for major.

Technical Courses (19)
ISYE 452 - Industrial Robotics (3),
OR MEE 422 - Design of Robot Manipulators (3),
OR MEE 425 - Design of Mobile Robots (3)
ISYE 453 - Integrated Product and Process Design (3)
ISYE 455 - Manufacturing Metrology (3),
OR ISYE 481 - Microprocessors in Industrial Control (3)
ISYE 496 - Manufacturing Systems Design Project (4)
MEE 212 - Strength of Materials (3)
MEE 430 - Computer-Aided Design and Manufacturing (3),
OR TECH 311 - Computer-Aided Modeling (3),
OR TECH 342 - Manufacturing Component Design (3),
OR TECH 414 - Computer-Aided Machine Design (3)

Total Hours for an Emphasis in Manufacturing Systems Engineering: 108

Integrated B.S./M.S. Sequence

This plan is open to all industrial and systems engineering majors who have finished at least 90 semester hours of undergraduate work and who have a cumulative GPA of at least 3.00. When students enter the integrated sequence, they must formulate a detailed plan of study and work closely with a faculty adviser throughout the program. Failure to do so may delay graduation.

Students in this sequence must satisfy all the requirements of the undergraduate engineering curriculum with the exception of 9 semester hours of industrial and systems engineering technical course work, as listed above under the heading "Technical Courses." These technical courses must be taken for graduate credit during the student's final undergraduate term. Students must also satisfy all the requirements for the M.S. degree with a major in industrial engineering. The plan may terminate with a B.S. degree only, but only if all the requirements for that degree have been met.

Course List

100. FUNDAMENTALS OF MANUFACTURING SYSTEMS (3). Basic elements of the entire manufacturing process including product conception, basic manufacturing operations, production processes, computer integration and automation, robotics, materials, planning and control of production systems, human factors, quality control, product support, and environmental aspects. Case studies of modern manufacturing systems emphasizing the latest technology, productivity, design for manufacture, concurrent engineering, and quality. Demonstration of machining processes and a computer-integrated manufacturing (CIM) line.

210. INTEGRATED SYSTEMS FOR INDUSTRY (3). Integration of people, materials, information, equipment, and energy. Introduction to industrial engineering systems for control of quality, production, ergonomics, cost, and work simplification. PRQ: MATH 110 or above.

220. ENGINEERING ECONOMY (3). Introduction to different methods of evaluation of net worth of engineering and business ventures. Topics include time value of money, comparison of alternatives, depreciation and income tax considerations, economic analysis of public sector projects, and break-even and sensitivity analysis. PRQ: MATH 210 or MATH 211 or MATH 229.

310. WORK MEASUREMENT AND WORK DESIGN (3). Techniques for improving and designing better methods; procedures for measuring work and developing time standards in production and service activities. Study of work center design and methods for improving human work. CRQ: ISYE 335 or STAT 350 or UBUS 223.

334. PROBABILITY FOR ENGINEERING (3). Engineering uses of probabilities and random variables. Reliability of engineering systems. Distributions of the properties and lifetimes of engineering products and processes. PRQ: MATH 230.

335. STATISTICS FOR ENGINEERING (3). Applications of data analysis to engineering. Elementary properties of data, displaying data, exploratory data analysis, fitting data to distributions using both nonparametric and parametric methods, comparing means and variability, simple regression, and design of experiments. PRQ: MATH 230.

350. PRINCIPLES OF MANUFACTURING PROCESSES (3). Introduction to basic manufacturing processes such as casting, powder metallurgy, bulk deformation, sheet metal forming, metal cutting, and joining. Integration of manufacturing processes and the effect of design and materials on manufacturing processes. PRQ: CHEM 210, MATH 229, and PHYS 253.

370. OPERATIONS RESEARCH: DETERMINISTIC MODELS (3). Introduction to deterministic optimization models and techniques. Basic linear algebra concepts and linear programming. Other optimization techniques. PRQ: MATH 232.

371. OPERATIONS RESEARCH: PROBABILISTIC MODELS (3). Introduction to elementary probabilistic models of operations research. Reliability of simple systems, applications of Markov chains, probabilistic decision models, applications of the Poisson process, elementary models for queuing systems. PRQ: ISYE 334.

401. INTERNSHIP (3). A work experience for the student lacking professional industrial and systems engineering experience. The learning experience is organized and supervised cooperatively by the department and selected organizations. A wage-earning position for a minimum of six 40-hour work weeks, or 240 hours, must be obtained with the guidance and approval of the department's faculty coordinator. The student and faculty coordinator must prepare a statement of educational objectives that will become part of the student's record. A report that describes the learning experience is also required to be placed in the student's record. PRQ: Junior standing and consent of major adviser and supervising instructor.

410. HUMAN FACTORS ENGINEERING (3). Introduction to the principles of human-machine systems, human error, auditory systems, and visual systems. Analysis of psychomotor skills, speech communications, and control-display relationships. PRQ: PHYS 253 and ISYE 335 or STAT 350 or UBUS 223.

430T. QUALITY CONTROL (3). Importance of quality; statistical concepts relevant to process control; control charts for variables and attributes; process capability analysis; acceptance sampling plans for variables and attributes. PRQ: ISYE 334 or ISYE 335 or STAT 350 or UBUS 223.

431. RELIABILITY ENGINEERING (3). Reliability analysis for the design, implementation, and operation of engineering systems, processes, and products. Fault trees, lifetime distributions, life testing, availability, and maintainability. PRQ: ISYE 334 or ISYE 335 or STAT 350.

435. EXPERIMENTAL DESIGN FOR ENGINEERING (3). Statistical techniques for designing and analyzing relationships among variables in engineering processes. Engineering applications of analysis of

variance (ANOVA), factorial design, and fractional factorial design. PRQ: ISYE 334 and ISYE 335.

436. APPLIED REGRESSION ANALYSIS FOR ENGINEERING (3). Statistical techniques for modeling, designing, and investigating relationships among variables in engineering processes. Engineering applications of linear regression with one predictor variable, multiple linear regression, and forecasting and time series analysis. PRQ: ISYE 334 and ISYE 335.

440. PRODUCTION PLANNING AND CONTROL (3). Analysis, design, and management of production systems. Topics include productivity measurement, forecasting techniques, project planning, line balancing, inventory systems, aggregate planning, master scheduling, operations scheduling, and modern approaches to production management such as just-in-time production. PRQ: ISYE 335 or UBUS 223 or STAT 350. CRQ: ISYE 370 or OMIS 327.

442. ENGINEERING PROJECT MANAGEMENT (3). Integrated approach to the management of engineering and high-technology projects that addresses the entire life cycle of the project including project initiation, organization, planning, implementation, control, and termination. Focus on human resources and the use of quantitative methods for project evaluation, scheduling, resource allocation, cost control, contract selection, risk management, and project quality management. PRQ: MATH 230 and STAT 208 or equivalent, or consent of department.

450. INTEGRATED MANUFACTURING SYSTEMS (3). Introduction to automation. Detroit automation, computer-aided manufacturing (CAM), group technology, flexible manufacturing systems, and production systems for manufacturing support. Applications of these concepts using the FMS laboratory. PRQ: MEE 330 and MEE 331 or ISYE 350.

451. EXPERT SYSTEMS IN ENGINEERING (3). Basic concepts and techniques of expert systems as well as the applications of expert systems in engineering. Topics include expert systems building tools and languages, a review of expert systems in engineering, and building expert systems for engineering problems. PRQ: CSCI 240 or consent of department.

452. INDUSTRIAL ROBOTICS (3). Fundamentals of robotics and robotic applications. Topics include manipulator kinematics and dynamics, performance characteristics of robots, robot programming, robotic work cell design, and application of robots in industry. PRQ: MEE 211.

453. INTEGRATED PRODUCT AND PROCESS DESIGN (3). Concurrent engineering, product design and development strategies, correlation between functional specifications and process capabilities, design for manufactureability, and the economics of product design and development. Topics include design and analysis of special tooling, jigs, fixtures, and dies for cost efficiency. PRQ: ISYE 350 and MEE 270.

455. MANUFACTURING METROLOGY (3). Study of concepts, theories, and techniques of automated inspection. Topics include dimensional measurement, in-process measurement and control, coordinate measuring machines, automated visual inspection, quality control, and process capability analysis. PRQ: ISYE 334 or ISYE 335 or STAT 350.

460. FACILITIES PLANNING AND DESIGN (3). Principles and practice of the planning of facility layout and material handling equipment for manufacturing and service systems. Topics include analytical approaches in site location, facility layout, material handling, and storage systems. Discussion of systematic procedures and computer-aided techniques. PRQ: ISYE 370. CRQ: ISYE 350.

472. QUEUEING METHODS FOR SERVICES AND MANUFACTURING (3). Behavior of queueing systems, focusing on mathematical models, and diagnosis and correction of problems. Arrival process, service policies, waiting line disciplines, bottlenecks, and networks. Reducing delay through control and design. PRQ: ISYE 371.

475. DECISION ANALYSIS FOR ENGINEERING (3). Elementary quantitative decision making when random factors are present. Decision trees, assessment of choices using expected utility, influence diagrams, and the value of information. PRQ: ISYE 334 or ISYE 335 or STAT 350 or UBUS 223.

480. SIMULATION MODELING AND ANALYSIS (3). Design and analysis of industrial systems using computer simulation models. Choice of input distributions, generation of random variates, design and construction of simulation models and experiments, and interpretation of generated output. PRQ: MATH 211 and UBUS 223, or ISYE 334 and ISYE 335, or STAT 350, and CSCI 240, and ISYE 371; or consent of department.

482. ENGINEERING INFORMATION SYSTEMS (3). Basic concepts, design, development, and the use of engineering information systems. Topics include architecture and components of engineering information systems, problem analysis, modeling, design, development, and validation of application systems. Theoretical and practical issues related to manipulation of engineering information and design of queries. Examples of engineering information systems. PRQ: CSCI 240 or OMIS 351.

495. SENIOR DESIGN PROJECT (4). Basic approaches to designing industrial engineering systems. Focus on application of industrial engineering techniques to complex problems, project proposal development, reporting of results, and ethical considerations. Individual or group design projects requiring problem definition and analysis, synthesis specification, and presentation of a designed solution. Students work under faculty supervision on problems posed by the industrial sector, service or governmental organizations, or on emerging research issues. PRQ: At least four of the following: ISYE 310, ISYE 430T, ISYE 440, ISYE 460, ISYE 480, or consent of department.

496. MANUFACTURING SYSTEMS DESIGN PROJECT (4). Basic approaches to designing manufacturing systems. Focus on application of industrial engineering techniques to complex problems, project proposal development, reporting of results, and ethical considerations. Individual or group design projects requiring problem definition and analysis, synthesis specification, and presentation of a designed solution. Students work under faculty supervision on problems posed by the industrial sector, service, or governmental organizations, or on emerging research issues. PRQ: ISYE 453 and at least three of ISYE 310, ISYE 430T, ISYE 440, ISYE 460, ISYE 480.

497. INDEPENDENT STUDY (1 to 3). Independent study and work to explore recent advances and innovative approaches to industrial engineering design, practice, and research. Written report required. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

498. CONTEMPORARY TOPICS IN INDUSTRIAL ENGINEERING (1 to 3). May be repeated to a maximum of 9 semester hours, with no more than 3 semester hours in the same topic area. PRQ: Consent of department.

Industrial and Systems Engineering Faculty

Dennis V. Stoia, M.B.A., P.E., University of Chicago, associate professor, interim chair

Ehsan Asoudegi, Ph.D., West Virginia University, assistant professor

Nourredine Boubekri, Ph.D., University of Nebraska, professor

Omar Ghrayeb, Ph.D., New Mexico State University, assistant professor

Murali Krishnamurthi, Ph.D., Texas A&M University, associate professor

Richard L. Marcellus, Ph.D., University of Michigan, associate professor

Reinaldo Moraga, Ph.D., University of Central Florida, assistant professor

Regina Rahm, Ph.D., University of Illinois, assistant professor

Department of Mechanical Engineering (MEE)

The Department of Mechanical Engineering offers an upper-division curriculum which leads to the B.S. in mechanical engineering. The curriculum is based on a strong foundation of fundamental courses in the pure sciences and engineering, and professional courses in mechanical engineering. The curriculum also provides a background in the design, analysis, development, and applications of both complete mechanical systems and a wide variety of individual system components in many different fields.

The B.S. program offered by the Department of Mechanical Engineering encompasses many areas, such as solid mechanics, dynamics and controls, fluid mechanics, thermodynamics, heat and mass transfer, energy conversion, and manufacturing. This background is strengthened and integrated through application in a sequence of broad engineering design and laboratory courses. The department has significant equipment for experimental investigations.

Computers are used extensively throughout the curriculum, with emphasis on interactive computer-aided design, computer-aided manufacturing, and simulation of engineering systems. Additionally, students may participate in an advanced computing curriculum track. Students participating in the track must take CSCI 240 and work on a computing/engineering project that spans four courses: MEE 381, MEE 481, MEE 482, and MEE 484. The Cooperative Education/Internship Program is also available to qualified students.

Mission

The mission of the Department of Mechanical Engineering is to provide an up-to-date, high-quality engineering education that meets current professional engineering standards and prepares competent engineers for local and global industry, to develop and/or apply engineering knowledge to address societal needs, and to provide quality professional and public services.

Educational Objectives

The program leading to the B.S. in mechanical engineering is designed to prepare students for successful careers in engineering and related fields by providing a balanced education in mechanical engineering that prepares students to apply analytical, computational, experimental, and methodological tools to solve engineering problems; a strong foundation in mathematics and physical sciences; a broad and balanced general education in the humanities, arts, social sciences, and interdisciplinary studies; sufficient training and development of skills for effective communication and teamwork; a proper understanding of an engineer's professional and ethical responsibilities in relation to engineering fields and society; and recognition of the need for lifelong learning.

Department Requirements

Candidates for the B.S. degree in mechanical engineering must earn a minimum of 18 semester hours in humanities, arts, social sciences, and interdisciplinary studies. This requirement is described under "Special General Education Requirements for Electrical, Industrial, and Mechanical Engineering Majors" in the College of Engineering and Engineering Technology section of this catalog. Students must consult with their faculty advisers to determine appropriate courses.

All mechanical engineering students must have their schedule reviewed, approved, and signed by their faculty adviser each semester. Any deviation from an approved course schedule may delay graduation.

Writing Across the Curriculum Courses

The Department of Mechanical Engineering recognizes that competence in technical writing is essential for engineers. To build upon the foundation for writing acquired in ENGL 103, Rhetoric and Composition I, and ENGL 104, Rhetoric and Composition II, or ENGL 105, Rhetoric and Composition, the Department of Mechanical Engineering has selected 300- and 400-level courses which are identified as writing intensive courses in the course description. These courses are MEE 390, MEE 425, MEE 481, MEE 482, and MEE 490. Each of these courses requires a significant technical writing component which will be reviewed by both the course instructor and a technical writing tutor.

Major in Mechanical Engineering (B.S.)

Requirements in Department (66-67)

MEE 210 - Engineering Mechanics I (3)
MEE 211 - Engineering Mechanics II (3)
MEE 212 - Strength of Materials (3)
MEE 220 - Mechanism Design (3)
MEE 270 - Engineering Graphics (3)
MEE 321 - Mechanical Vibrations I (3)
MEE 322 - Dynamic Systems and Control I (3),
  OR ELE 380 - Control Systems I (4)
MEE 330 - Materials Science (4)
MEE 331 - Manufacturing Processes (3)
MEE 340 - Fluid Mechanics (3)
MEE 350 - Engineering Thermodynamics (3)
MEE 352 - Heat Transfer (3)
MEE 380 - Computational Methods in Engineering Design (3),
  OR MEE 381 - Computational Methods and Programming in Engineering Design (3)
MEE 390 - Experimental Methods in Mechanical Engineering I (3)
MEE 430 - Computer-Aided Design and Manufacturing (3)
MEE 452 - Design of Thermal Systems (3)
MEE 470 - Design of Machine Elements (3)
MEE 481 - Engineering Design Seminar (1)
MEE 482 - Senior Mechanical Engineering Design Project (3)
MEE 494 - Mechanical Engineering Competency (1)
A total of three technical electives from Group-A and Group-B below with at least two from Group-A
Group-A: Design-oriented electives
  ISYE 450 - Integrated Manufacturing Systems (3)
  MEE 410 - Intermediate Mechanics of Materials (3)
  MEE 422 - Design of Robot Manipulators (3)
  MEE 424 - Machinery Vibration (3)
  MEE 425 - Design of Mobile Robots (3)
  MEE 431 - Composite Materials (3)
  MEE 451 - Refrigeration and Air Conditioning (3)
  MEE 453 - Propulsion (3)
  MEE 484 - Advanced Computing in Mechanical Engineering (3)
  MEE 490 - Experimental Methods in Mechanical Engineering II (3)
Group-B: Other electives
  ISYE 430T - Quality Control (3)
  ISYE 431 - Reliability Engineering (3)
  ISYE 451 - Expert Systems in Engineering (3)
  MEE 351 - Applied Thermodynamics (3)

MEE 421 - Dynamic Systems and Control II (3)
MEE 423 - Mechanical Reliability (3)
MEE 480 - Finite Element Methods (3)
TECH 344 - Materials and Processes in the Plastics Industry (3)
TECH 345 - Plastic Molding Processes (4)

One of the following (3)
ISYE 430T - Quality Control (3)
MEE 351 - Applied Thermodynamics (3)
MEE 421 - Dynamic Systems and Control II (3)
MEE 423 - Mechanical Reliability (3)
MEE 480 - Finite Element Methods (3)
TECH 344 - Materials and Processes in the Plastics Industry (3)

Requirements outside Department (42)

*CHEM 210T - General Chemistry I (3)
*CHEM 212 - General Chemistry Laboratory I (1)
CSCI 230 - Computer Programming in Fortran (4), OR CSCI 240 - Computer Programming in C++ (4)
ELE 210 - Engineering Circuit Analysis (3)
ELE 210U - Engineering Circuit Laboratory Project (1)
ISYE 220 - Engineering Economy (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 336 - Ordinary Differential Equations (3)
STAT 350 - Introduction to Probability and Statistics (3), OR ISYE 335 - Statistics for Engineering (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
UEET 101 - Introduction to Engineering (1)

Total Hours for a Major in Mechanical Engineering: 108-109

Course List

200. ENERGY AND THE ENVIRONMENT (3). Development and current status of energy sources, technologies, consumption patterns, conservation, and energy policies. Emphasis on environmental effects of various choices made at each step of the energy cycle, and examination of those choices from technological and socioeconomical points of view. PRQ: PHYS 150 or CHEM 110.

210. ENGINEERING MECHANICS I (3). Principles of engineering mechanics; vector algebra, force systems, free-body diagrams, resultants, equilibrium, centroids and centers of gravity; application to trusses, frames, machines, and beams; moments of inertia; friction. PRQ: MATH 229 with grade of C or better; PHYS 253 with grade of C or better. CRQ: MATH 230.

211. ENGINEERING MECHANICS II (3). Kinematics of particles and rigid bodies; kinetics of particles and rigid bodies: force-mass-acceleration, work and energy, impulse and momentum. PRQ: MEE 210 and MATH 230 with grade of C or better.

212. STRENGTH OF MATERIALS (3). Mechanics of deformable bodies with emphasis on principles of stress and strain; shear and bending moments; torsion, buckling; failure criteria and design concepts. PRQ: MEE 210.

220. MECHANISM DESIGN (3). Introduction to kinematics and mechanism; mechanism design philosophy; displacement, velocity, and acceleration analysis; CAM design; gears; introduction to kinematic synthesis. Concepts of design supplemented by computer techniques of analysis. CRQ: UEET 101. PRQ: CSCI 230 and MEE 211, or consent of department.

230. MATERIALS AND MANUFACTURING PROCESSES (3). Structures and properties of materials; testing and heat treatment of engineering materials; casting and forming processes; machining processes; welding and allied processes; processes and techniques related to manufacturing. Not counted for credit toward the major in mechanical engineering. PRQ: CHEM 210T, CHEM 212, MATH 229, and PHYS 253, or consent of department.

270. ENGINEERING GRAPHICS (3). Graphics in engineering and geometric constructions; orthographic projection and descriptive geometry with auxiliary views and revolution; pictorial presentation; developments; introduction to computer-aided drawing. CRQ: MATH 155 or MATH 229.

321. MECHANICAL VIBRATIONS I (3). Oscillatory motion, free vibration of single degree freedom systems, harmonically excited vibration, vibration under general forcing conditions, two or more degrees of freedom systems, and generalized eigenvalue problems. PRQ: MEE 211, MEE 212, and MATH 336.

322. DYNAMIC SYSTEMS AND CONTROL I (3). Introduction to simple harmonic motion, damping, resonance, and multiple degree of freedom systems. Modeling of mechanical systems and their transfer functions, feedback control, and introduction to Root-locus and Bode design. PRQ: MEE 211, ELE 315 or MEE 321, or consent of department.

330. MATERIALS SCIENCE (4). Introduction to the relation between processing, structure, properties, and performance of metallic, ceramic, and polymeric engineering materials. PRQ: CHEM 210T and CHEM 212 with grade of C or better and PHYS 273 with grade of C or better. CRQ: MEE 212 or consent of department.

331. MANUFACTURING PROCESSES (3). Mechanical properties of materials; metallurgical control of mechanical properties; casting and forming processes; machining processes; welding and allied processes; processes and techniques related to manufacturing. PRQ: MEE 330.

340. FLUID MECHANICS (3). Introduction and fundamentals of fluid statics, integral form and control volume analysis, differential analysis and potential flow, incompressible viscous internal and external flow, and compressible flow. Design projects required. PRQ: MEE 211, MATH 232, and MATH 336.

350. ENGINEERING THERMODYNAMICS (3). Principles of thermal energy conversion; properties of pure substance; work and heat; first law of thermodynamics, control volume, steady state and steady flow process, uniform state and uniform flow process; second law of thermodynamics, entropy, availability; power and refrigeration cycles. PRQ: MEE 211 and MATH 336.

351. APPLIED THERMODYNAMICS (3). Thermodynamic cycles and processes; generalized thermodynamic relationships; mixtures and solutions; chemical reaction; phase and chemical equilibrium; nozzles, diffusers, and flowmeters. PRQ: MEE 350.

352. HEAT TRANSFER (3). Basic laws of heat transfer; steady state heat conduction, heat generation, and extended surfaces; unsteady and multidimensional conduction; analytical, graphical, and numerical solutions; external and internal forced convection; boundary layer theory; free convection, similarity and integral solutions; radiation properties and exchange between black and nonblack surfaces; numerical solutions techniques. Design projects required. PRQ: MEE 340 and MEE 350. CRQ: MEE 380 or MEE 381.

380. COMPUTATIONAL METHODS IN ENGINEERING DESIGN (3). Number representation, root finding, systems of linear equations and matrices, eigenvalues and eigenvectors, curve fitting, integration and differentiation, finite difference methods, and linear programming. PRQ: CSCI 230 or CSCI 240, MATH 336, and MEE 211. CRQ: MEE 212.

381. COMPUTATIONAL METHODS AND PROGRAMMING IN ENGINEERING DESIGN (3). Number representation, root finding, matrix inversion/factorization, eigenvalues/eigenvectors, minimization, integration of functions, and ODEs. Emphasis on programming style and technique in the C++ language, including object-based programming, computational efficiency, code reuse, and scalability. PRQ: CSCI 240 and MATH 336, or consent of department.

390. EXPERIMENTAL METHODS IN MECHANICAL ENGINEERING I (3). Basic concepts of measurement methods and planning and documenting experiments. Typical sensors, transducers, and measurement system behavior. Data sampling and computerized data acquisition systems. Statistical methods and uncertainty analysis applied to data reduction. Laboratory experiments with measurement of selected material properties and solid-mechanical and fluid/thermal quantities. A writing-intensive course. PRQ: MEE 212 and ELE 210. CRQ: MEE 340, MEE 350, and STAT 350 or IENG 335.

410. INTERMEDIATE MECHANICS OF MATERIALS (3). Buckling, unsymmetric bending, transverse loading, curved beams, thick-walled cylinders and rotating disks, torsion of thin-walled tubes, contact

*Available for general education credit.

stresses, plastic behavior, strain energy and Castigliano's theorem, strength theories and design equations, fatigue, and fracture. PRQ: MEE 212 and MATH 336. CRQ: MEE 380 or MEE 381 or consent of department.

421. DYNAMIC SYSTEMS AND CONTROL II (3). Concepts of linear system theory; modal analysis, Lagrange's Equations, approximate numerical methods for solving vibration problems. Root-locus and frequency response design. State-space analysis. Case studies in control system design. PRQ: MEE 322 or ELE 380, or consent of department.

422. DESIGN OF ROBOT MANIPULATORS (3). Mathematics, programming, and control in the design of robot manipulators. Includes topics on kinematics, differential relationships and dynamics, motion trajectories, and control algorithms. PRQ: MEE 211 and MATH 336, or consent of department.

423. MECHANICAL RELIABILITY (3). Basic probability, statistics, and reliability concepts applicable to mechanical systems. Probabilistic treatment of loads, stress, strength, safety indices, and fatigue. Mechanical equipment reliability; wear-out; reliability-based design, testing, and maintenance. PRQ: MEE 212. CRQ: MEE 470 or consent of department.

424. MACHINERY VIBRATION (3). Machinery vibration analysis: signature analysis in time and frequency domains, fault detection, diagnosis, and correction; instrumentation; case studies; machine monitoring programs. PRQ: MEE 322. CRQ: MEE 470.

425. DESIGN OF MOBILE ROBOTS (3). Configuration and architecture design. Position estimation, planning, and control. Perception and learning. Group capstone project in the design and development of a mobile robot. Lecture, discussion, case studies of mobile robot design. A writing-intensive course. PRQ: MEE 211 or TECH 375, or consent of department.

426. MECHATRONICS SYSTEM DESIGN (3). Use of computers embedded in mechanical systems, microcontrollers, real-time software, analog and digital world, sensors and actuators interfacing, electronics for mechatronics, measures of system performance, state transition logic and multitasking, mechatronics system design problems, advanced concepts and case studies of mechanical systems with embedded electronics. PRQ: CSCI 230 or CSCI 240, ELE 210, and ELE 380 or MEE 322, or consent of department.

430. COMPUTER-AIDED DESIGN AND MANUFACTURING (3). Computers for CAD/CAM, methodology in CAD, geometry description, geometric modeling, geometry construction by programming, applications of finite element method, NC part programming with G-code and APT, machine tool path verification with advanced software. PRQ: MEE 212, MEE 270, and either PRQ: MEE 230 or CRQ: MEE 331, or consent of department.

431. COMPOSITE MATERIALS (3). Fiber and matrix properties, micromechanical and macromechanical behavior of lamina, lamination theory. PRQ: MEE 212, MEE 330, and MEE 380 of MEE 381, or consent of department.

451. REFRIGERATION AND AIR CONDITIONING (3). Refrigerants; vapor compression and absorption refrigeration systems; cryogenics; psychrometrics and humidity measurements; extended surface coils and transfer processes between moist air and water; solar radiation and heating and cooling loads of buildings and structures. PRQ: MEE 350 and MEE 352.

452. DESIGN OF THERMAL SYSTEMS (3). Application of principles of fluid mechanics, heat transfer, and thermodynamics in the component design of thermal systems. Examples are drawn from power generations, environmental control, and industrial processes. Students work on group projects for integration of these components in the design of thermal systems. PRQ: MEE 350 and MEE 352.

453. PROPULSION (3). Aerodynamics and thermodynamics of gas turbine airbreathing and rocket engines; quasi-one-dimensional flow; ideal and real cycle analysis; component performance; engine operating off-design characteristics. PRQ: MEE 340 and MEE 350.

470. DESIGN OF MACHINE ELEMENTS (3). Fatigue analysis; design of screws, fasteners, and connections; design of welded, brazed, and bonded joints; mechanical springs; bearings; gears; shafts; design of clutches, brakes, couplings, and flywheels; flexible mechanical elements. PRQ: MEE 212 and MEE 220. CRQ: MEE 331 or consent of department.

480. FINITE ELEMENT METHODS (3). Methods of weighted residual; variational methods of approximation; variational formulation; shape functions; finite element formulation; error analysis; computer implementation; and applications to solid mechanics, dynamics, vibration, fluid mechanics, and heat transfer. PRQ: MEE 322, MEE 352, and MEE 380 or MEE 381, or consent of department.

481. ENGINEERING DESIGN SEMINAR (1). Complete preparation of an engineering system design or project proposal covering problem identification, conceptual design, and the schedule of work required to carry out the project. (Projects are carried out in MEE 482). Concurrent seminar of methodology, standards and safety codes, professional ethics, decision making, and design evaluations. A writing-intensive course. CRQ: MEE 350, MEE 390, and MEE 470.

482. SENIOR MECHANICAL ENGINEERING DESIGN PROJECT (3). Special design project under individual supervision of the instructor. A writing-intensive course. PRQ: MEE 481.

484. ADVANCED COMPUTING IN MECHANICAL ENGINEERING (3). Project-based course which combines engineering science with advanced computing, including a practical introduction to object-oriented programming, data structures, and other topics that facilitate programming-in-the-large. Students write a substantial portion of a vehicle dynamics simulation. PRQ: MEE 381 or consent of department. Recommended CRQ: MEE 481.

490. EXPERIMENTAL METHODS IN MECHANICAL ENGINEERING II (3). Experimental design; statistical analysis of data; computerized data acquisition and reduction; experiments on signature analysis, fluid flow, heat transfer, material properties, and vibrations; individual experimental design projects. A writing-intensive course. PRQ: MEE 390 or consent of department.

494. MECHANICAL ENGINEERING COMPETENCY (1). Review of fundamental concepts and problem solving in mathematics, physics, chemistry, electrical circuits, statics, dynamics, strength of materials, material science, fluid mechanics, thermodynamics, heat transfer, control, and computer programming. Grades based on performance on an examination which is the equivalent of a national standardized test. PRQ: Senior status.

497. INDEPENDENT STUDY (1 to 3). Independent pursuit of problems in mechanical engineering under faculty supervision. Written report required. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

498. SPECIAL TOPICS (1 to 3). Topics not included in regular courses. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

Mechanical Engineering Faculty

Shin-Min Song, Ohio State University, professor, chair
Anima Bose, Ph.D., Kent State University, adjunct associate professor
Brianno Coller, Ph.D., Cornell University, associate professor
Behrooz Fallahi, Ph.D., P.E., Purdue University, associate professor
Sengoda G. Ganesan, Ph.D., P.E., Oklahoma State University, associate professor
Jenn-Terng Gau, Ph.D., Ohio State University, assistant professor
Abhijit Gupta, Ph.D., P.E., Pennsylvania State University, associate professor
Romualdas Kasuba, Ph.D., P.E., University of Illinois, professor
Meung Jung Kim, Ph.D., Virginia Polytechnic Institute and StateUniversity, associate professor
Milivoje Kostic, Ph.D., P.E., University of Illinois, Chicago, associate professor
Pradip Majumdar, Ph.D., Illinois Institute of Technology, professor
Parviz Payvar, Ph.D., P.E., University of California, Berkeley, professor
Scott R. Short, Ph.D., P.E., University of Dayton, assistant professor

Department of Technology (TECH)

The mission of the Department of Technology encompasses the transmission, expansion, and application of technological knowledge through teaching, research, and public service. The department prepares technically oriented professionals for leadership, management, and service positions in business, industry, education, and government. The major in technology includes emphases in electrical engineering technology, manufacturing engineering technology, nuclear engineering technology, and industrial technology. Instruction in these emphases seeks to improve productivity, safety, and the well being of society through combining scientific, engineering, and management knowledge with technical skills.

Abilities such as leadership, practical applications, problem solving, creativity, intellectual curiosity, and a positive attitude toward lifelong learning are fundamental to the modern industrial community served by the Department of Technology. These needs are met in harmony with the university, educating traditional and non-traditional students through career preparation and enhancement programs. The faculty accomplish these tasks using a variety of flexible, innovative, interesting, and creative course delivery systems.

Department Requirement

All technology majors/minors who do not place into MATH 229 must obtain a grade of C or better in MATH 155.

Major in Technology (B.S.)

Emphasis 1. Electrical Engineering Technology

Requirements in Department (70)

TECH 175 - Electricity and Electronics Fundamentals (3)
TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
TECH 211 - Computer-Aided Design (3)
TECH 265 - Basic Manufacturing Processes (3)
TECH 270 - Electrical Fundamentals and Circuit Analysis I (3)
TECH 270A - Electrical Fundamentals and Circuit Analysis Laboratory I (1)
TECH 271 - Electrical Fundamentals and Circuit Analysis II (3)
TECH 271A - Electrical Fundamentals and Circuit Analysis Laboratory II (1)
TECH 276 - Electronics I (3)
TECH 276A - Electronics I Laboratory (1)
TECH 277 - Digital Logic Design (3)
TECH 277A - Digital Logic Design Laboratory (1)
TECH 375 - Control Systems (3)
TECH 376 - Electronics II (3)
TECH 376A - Electronics II Laboratory (1)
TECH 377 - Microprocessors and Interfacing (3)
TECH 377A - Microprocessors and Interfacing Laboratory (1)
TECH 378 - Communication System Design I (3)
TECH 378A - Communication System Design Laboratory (1)
TECH 379 - Electric Machines and Transformers (3)
TECH 379A - Electric Machines and Transformers Laboratory (1)
TECH 443 - Engineering Economy (3)
TECH 476 - Industrial Control Electronics (3)
TECH 477 - Engineering Technology Senior Design Project I (1)
TECH 478 - Engineering Technology Senior Design Project II (3)
Course work from the following with advice and consent of adviser (9)
  TECH 430 - Microcontrollers Interfacing and Applications (3)
  TECH 470 - Fiber Optics Communications (3)
  TECH 471 - Digital and Data Communication (3)
  TECH 472 - Integrated Circuit Devices (3)
  TECH 473 - Advanced Digital Design (3)
  TECH 479 - Special Topics in Engineering Technology (1-3)
Select two of the following courses with advice and consent of adviser (6)
  TECH 295 - Manufacturing Computer Applications (3)
  TECH 409 - Internship (3)
  TECH 425 - Programmable Electronic Controllers (3)

Requirements outside Department (29-30)

*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
  OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)
CSCI 240 - Computer Programming in C++ (4)
ENGL 308 - Technical Writing (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
*PHYS 210 - General Physics I (4),
  OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*STAT 208 - Basic Statistics (3),
  OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 1, Electrical Engineering Technology: 99-100

Emphasis 2. Manufacturing Engineering Technology

Requirements in Department (75-76)

TECH 175 - Electricity and Electronics Fundamentals (3)
TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
TECH 210 - Engineering Mechanics (2)
TECH 211 - Computer-Aided Design (3)
TECH 212T - Engineering Dynamics (2)
TECH 262 - Machine Production Processes (3)
TECH 265 - Basic Manufacturing Processes (3)
TECH 295 - Manufacturing Computer Applications (3)
TECH 312 - Design Dimensioning and Tolerancing (3)
TECH 326 - Fluid Power Technology (3)
TECH 342 - Manufacturing Component Design (3)
TECH 362 - Numerical Control Systems (3)
TECH 369 - Strength of Materials (3)
TECH 391 - Industrial Quality Control (3)
TECH 393 - Structure and Properties of Materials (3)
TECH 420 - Computer-Integrated Manufacturing (3)
TECH 423 - Automated Manufacturing Systems (3)
TECH 425 - Programmable Electronic Controllers (3)
TECH 443 - Engineering Economy (3)
TECH 477 - Engineering Technology Senior Design Project I (1)
TECH 478 - Engineering Technology Senior Design Project II (3)

*Available for general education credit.

Course work from the following with advice and consent of adviser (9-10)
- TECH 260 - Metal Fabrication Processes (3)
- TECH 313 - Product Design and Development for Manufacturability (3)
- TECH 314 - Tool and Die Design (3)
- TECH 344 - Materials and Processes in the Plastics Industry (3)
- TECH 345 - Plastic Molding Processes (4)
- TECH 364 - Advanced Numerical Control Programming (3)
- TECH 365 - Metrology (3)
- TECH 479 - Special Topics in Engineering Technology (1-3)

Two of the following (6)
- TECH 401 - Ethics in Technology (3)
- TECH 404 - Supervision in Industry (3)
- TECH 409 - Internship (3)
- TECH 429 - Plant Location, Layout, and Materials Handling (3)
- TECH 434 - Human Factors in Industrial Accident Prevention (3)
- TECH 441 - Hazard Control in Industrial Operations (3)
- TECH 442 - Work Simplification and Measurement (3)
- TECH 444 - Production Control Systems (3)
- TECH 482 - Industrial Safety Engineering Analysis (3)
- TECH 492 - Manufacturing Distribution Applications (3)
- TECH 496 - Industrial Project Management (3)

Requirements outside Department (25-26)

*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
ENGL 308 - Technical Writing (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
*PHYS 210 - General Physics I (4),
OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 2, Manufacturing Engineering Technology: 100-102

Emphasis 3. Nuclear Engineering Technology

Admission to the emphasis in nuclear engineering technology is limited to employees of electric power companies because of the proficiency credit granted for U.S. Nuclear Regulatory Commission reactor operator license training.

Requirements in Department (61)

TECH 175 - Electricity and Electronics Fundamentals (3)
TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
TECH 211 - Computer-Aided Design (3)
TECH 265 - Basic Manufacturing Processes (3)
TECH 443 - Engineering Economy (3)
TECH 477 - Engineering Technology Senior Design Project I (1)
TECH 478 - Engineering Technology Senior Design Project II (3)
Nuclear Regulatory Commission Reactor Operator Training (30)
TECH course work with advice and consent of adviser (14)

Requirements outside Department (29-30)

*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
CSCI 240 - Computer Programming in C++ (4)
ENGL 308 - Technical Writing (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
*PHYS 210 - General Physics I (4),
OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 3, Nuclear Engineering Technology: 90-91

Emphasis 4. Industrial Technology

Technology majors cannot use TECH 294 as a TECH Elective, OR for General Education Credit.

Requirements in Department (67-71)

TECH 175 - Electricity and Electronics Fundamentals (3)
TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
TECH 211 - Computer-Aided Design (3)
TECH 265 - Basic Manufacturing Processes (3)
TECH 302 - Graphic Presentation and Communication (3)
TECH 391 - Industrial Quality Control (3)
TECH 395 - Industrial Data Processing (3)
TECH 404 - Supervision in Industry (3)
TECH 429 - Plant Location, Layout, and Materials Handling (3)
TECH 434 - Human Factors in Industrial Accident Prevention (3)
TECH 496 - Industrial Project Management (3)
Two of the following (6)
- TECH 402 - Industrial Training and Evaluation (3)
- TECH 442 - Work Simplification and Measurement (3)
- TECH 443 - Engineering Economy (3)
- TECH 444 - Production Control Systems (3)
- TECH 484 - Energy Management (3)
- TECH 492 - Manufacturing Distribution Applications (3)

Technology courses chosen with the advice and consent of the departmental adviser (6-8)
One of the following areas of study (23-25)

Computer-Aided Design (24-25)

TECH 262 - Machine Production Processes (3)
TECH 311 - Computer-Aided Modeling (3)
TECH 312 - Design Dimensioning and Tolerancing (3)
TECH 313 - Product Design and Development for Manufacturability (3)
TECH 314 - Tool and Die Design (3)
TECH 414 - Computer-Aided Machine Design (3)
Two of the following (6-7)
- TECH 260 - Metal Fabrication Processes (3)
- TECH 344 - Materials and Processes in the Plastics Industry (3)
- TECH 345 - Plastic Molding Processes (4)
- TECH 365 - Metrology (3)
- TECH 409 - Internship (3)

Electronics Technology (25)

TECH 270 - Electrical Fundamentals and Circuit Analysis I (3)
TECH 270A - Electrical Fundamentals and Circuit Analysis Laboratory I (1)
TECH 276 - Electronics I (3)
TECH 276A - Electronics I Laboratory (1)
TECH 277 - Digital Logic Design (3)
TECH 277A - Digital Logic Design Laboratory (1)
TECH 295 - Manufacturing Computer Applications (3)
TECH 377 - Microprocessors and Interfacing (3)
TECH 377A - Microprocessors and Interfacing Laboratory (1)
Two of the following (6)
- TECH 409 - Internship (3)
- TECH 425 - Programmable Electronic Controllers (3)
- TECH 430 - Microcontrollers Interfacing and Applications (3)
- TECH 473 - Advanced Digital Design (3)

*Available for general education credit.

Environmental Safety and Health (24)

Students interested in Ergonomics and/or Industrial Hygiene studies should take BIOS 311 (4) as an elective.
TECH 231 - Safety Programs (3)
TECH 245 - Pollution, Pestilence, Prevention, and the Cost of Doing Business (3)
TECH 432 - Disaster Preparedness (3)
TECH 436 - Design and Administration of Industrial Safety Programs (3)
TECH 437 - Fundamentals of Industrial Hygiene (3)
TECH 441 - Hazard Control in Industrial Operations (3)
TECH 481 - Ergonomics (3)
One of the following (3)
- TECH 409 - Internship (3)
- TECH 431 - Industrial Ventilation (3)
- TECH 433 - Toxicology for Industry (3)
- TECH 435 - Legal Aspects of Safety (3)
- TECH 438 - Safety in Transportation Systems (3)
- TECH 440 - Monitoring and Evaluating Work Environments (3)
- TECH 482 - Industrial Safety Engineering Analysis (3)
- TECH 483 - Applied Ergonomics (3)
- TECH 485 - Industrial Risk Management (3)

Manufacturing Technology (24-25)

TECH 260 - Metal Fabrication Processes (3)
TECH 262 - Machine Production Processes (3)
TECH 311 - Computer-Aided Modeling (3)
TECH 313 - Product Design and Development for Manufacturability (3)
TECH 365 - Metrology (3)
TECH 420 - Computer-Integrated Manufacturing (3)
Two of the following (6-7)
- TECH 312 - Design Dimensioning and Tolerancing (3)
- TECH 344 - Materials and Processes in the Plastics Industry (3)
- TECH 345 - Plastic Molding Processes (4)
- TECH 409 - Internship (3)
- TECH 427 - Testing Methods, Procedures, and Selection of Industrial Plastics (3)
- TECH 441 - Hazard Control in Industrial Operations (3)

Plastics Technology (25)

TECH 262 - Machine Production Processes (3)
TECH 311 - Computer-Aided Modeling (3)
TECH 344 - Materials and Processes in the Plastics Industry (3)
TECH 345 - Plastic Molding Processes (4)
TECH 393 - Structure and Properties of Materials (3)
TECH 427 - Testing Methods, Procedures, and Selection of Industrial Plastics (3)
Two of the following (6)
- TECH 312 - Design Dimensioning and Tolerancing (3)
- TECH 313 - Product Design and Development for Manufacturability (3)
- TECH 314 - Tool and Die Design (3)
- TECH 365 - Metrology (3)
- TECH 409 - Internship (3)

Special Technical Study (23)

This area of study is limited to transfer students with an Associate of Applied Science degree with a major in a recognized field of industrial technology. Up to 23 semester hours of credit from the A.A.S. degree may be applied to this area of study with the consent of the departmental adviser and department chair.

Requirements outside Department (20-21)

ACCY 206 - Introductory Financial Accounting (3),
OR ACCY 288 - Fundamentals of Accounting (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
*MATH 155 - Trigonometry and Elementary Functions (3)
MGMT 346 - Business Communication (3),
OR ENGL 308 - Technical Writing (3)
*PHYS 150A - Physics (4),
OR *PHYS 210 - General Physics I (4)
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 4, Industrial Technology: 87-92

Minor in Electrical Engineering Technology (20)

TECH 175 - Electricity and Electronics Fundamentals (3)
TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
TECH 270 - Electrical Fundamentals and Circuit Analysis I (3)
TECH 270A - Electrical Fundamentals and Circuit Analysis Laboratory I (1)
TECH 271 - Electrical Fundamentals and Circuit Analysis II (3)
TECH 271A - Electrical Fundamentals and Circuit Analysis Laboratory II (1)
TECH 276 - Electronics I (3)
TECH 276A - Electronics I Laboratory (1)
TECH 277 - Digital Logic Design (3)
TECH 277A - Digital Logic Design Laboratory (1)

Minor in Manufacturing Engineering Technology (24)

TECH 211 - Computer-Aided Design (3)
TECH 260 - Metal Fabrication Processes (3)
TECH 262 - Machine Production Processes (3)
TECH 265 - Basic Manufacturing Processes (3)
TECH 344 - Materials and Processes in the Plastics Industry (3)
TECH 420 - Computer-Integrated Manufacturing (3)
Course work in technology with advice and consent of adviser (6)

Minor in Productivity (21)

The minor in productivity provides preparation for productivity analysis and improvement as required by large and small manufacturing concerns. Similar courses from other disciplines such as ergonomics, industrial engineering, operations management and information systems, and statistics may be considered as substitutes; however, at least four courses must be taken in the Department of Technology.

TECH 391 - Industrial Quality Control (3)
TECH 429 - Plant Location, Layout, and Materials Handling (3)
TECH 434 - Human Factors in Industrial Accident Prevention (3)
TECH 442 - Work Simplification and Measurement (3)
TECH 443 - Engineering Economy (3)
TECH 444 - Production Control Systems (3)
TECH 481 - Ergonomics (3)

Minor in Safety (24)

This course of study provides preparation for safety responsibilities in industry, insurance, business, government, and civic organizations. Students majoring in the Department of Technology may also complete the requirements for the safety minor.
TECH 231 - Safety Programs (3)
TECH 245 - Pollution, Pestilence, Prevention, and the Cost of Doing Business (3)

*Available for general education credit.

TECH 432 - Disaster Preparedness (3)
TECH 434 - Human Factors in Industrial Accident Prevention (3)
TECH 436 - Design and Administration of Industrial Safety Programs (3)
TECH 437 - Fundamentals of Industrial Hygiene (3)
Two of the following (6)
- TECH 431 - Industrial Ventilation (3)
- TECH 433 - Toxicology for Industry (3)
- TECH 435 - Legal Aspects of Safety (3)
- TECH 440 - Monitoring and Evaluating Work Environments (3)
- TECH 441 - Hazard Control in Industrial Operations (3)
- TECH 481 - Ergonomics (3)
- TECH 482 - Industrial Safety Engineering Analysis (3)
- TECH 483 - Applied Ergonomics (3)
- TECH 485 - Industrial Risk Management (3)

Course List

175. ELECTRICITY AND ELECTRONICS FUNDAMENTALS (3). Fundamentals of dc and ac circuits, network laws and theorems, passive circuit components, semiconductors, electric machines, and digital systems. PRQ: MATH 155 and PHYS 150A or PHYS 210. CRQ: TECH 175A.

175A. ELECTRICITY AND ELECTRONICS FUNDAMENTALS LABORATORY (1). Selected laboratory experiments to accompany TECH 175. CRQ: TECH 175.

200. EXTERNAL EDUCATION (3 to 30). Credit for approved apprenticeships and related training programs supervised by professional specialist. A maximum of 30 semester hours may be awarded if approved. Applications for credit must be made to and approved by the department curriculum committee and also approved by the associate dean of the College of Engineering and Engineering Technology.

210. ENGINEERING MECHANICS(2). Principles and application of statics; vector algebra, force systems, centers of gravity, free body analysis, truss systems, moments of inertia. PRQ: PHYS 210 or PHYS 253. CRQ: MATH 229.

211. COMPUTER-AIDED DESIGN (3). Basic and advanced computer-aided drafting in two dimensions. CAD tools required to document engineering designs. Creating detail and assembly representations. Global and working coordinate systems.

212T. ENGINEERING DYNAMICS (2). Basic principles including friction and motion of a point in both one and two dimensions, as well as rigid body motion. CRQ: MATH 229 and TECH 210.

214. MACHINE DESIGN GRAPHICS (3). Technique of presenting multiview drawings of machine elements such as gears, cams, bearings, and linkages using CAD. Surface texture specifications, representing temporary and permanent fasteners. PRQ: TECH 211.

230. PRINCIPLES OF ACCIDENT PREVENTION (3). Need for, and status of, safety programs today. Opportunities for meaningful student investigations of contemporary safety programs and problems.

231. SAFETY PROGRAMS (3). Review of federal safety standards and their relationship to occupational safety and health programs. Study of equipment, processes, materials, material handling equipment, chemicals, fire systems, and the work environment related to occupational settings.

245. POLLUTION, PESTILENCE, PREVENTION, AND THE COST OF DOING BUSINESS (3). Study of environmental and occupational issues with an impact on the safety and health of employees and the general population. Analysis of case studies to evaluate potentially adverse outcomes (injury, illness, environmental impact, etc.) in relation to existing legislation (EPA, OSHA, HSA) and the existing public policies. Economic impact of adverse environmental and safety issues in the private sector.

260. METAL FABRICATION PROCESSES (3). Introduction to forming and fabrication processes including welding, mechanical fasteners, and adhesive bonding. PRQ: MATH 155 and TECH 211, or consent of department.

262. MACHINE PRODUCTION PROCESSES (3). Detailed study of traditional and contemporary methods of metal machining. Laboratory experience includes the fundamentals of machine tool setup and operation, precision measurement techniques, and machine tool safety, care, and maintenance. PRQ: TECH 211.

265. BASIC MANUFACTURING PROCESSES (3). Introduction to the materials, techniques, and equipment of industrial manufacturing. Emphasis on laboratory demonstration and simulation activities such as machining, welding, casting, and forming operations. PRQ: MATH 155.

270. ELECTRICAL FUNDAMENTALS AND CIRCUIT ANALYSIS I (3). Introduction to circuit elements and models; Kirchhoff's laws, Thevenin's theorem, and Norton's theorem; maximum power transfer; series and parallel circuits; power triangle; two-port networks; equivalent networks with direct current or sinusoidal current. PRQ: MATH 155 and TECH 175. CRQ: TECH 270A.

270A. ELECTRICAL FUNDAMENTALS AND CIRCUIT ANALYSIS LABORATORY I (1). Selected experiments to accompany TECH 270. CRQ: TECH 270.

271. ELECTRICAL FUNDAMENTALS AND CIRCUIT ANALYSIS II (3). Study of elementary circuits and analysis; resonance and antiresonance circuits; power and energy; frequency responses of coupled circuits, nonsinusoidal waves and filter circuits; electromagnetic-field concept. PRQ: TECH 270. CRQ: MATH 229 and TECH 271A.

271A. ELECTRICAL FUNDAMENTALS AND CIRCUIT ANALYSIS LABORATORY II (1). Selected experiments to accompany TECH 271. CRQ: TECH 271.

276. ELECTRONICS I (3). First semester of a two-semester sequence covering basic semiconductor theory and operations of various types of diodes, bipolar transistors, and field-effect transistors. Topics include transistors biasing, incremental models, stability, and single/multistage amplifiers. PRQ: TECH 270. CRQ: MATH 229 and TECH 276A.

276A. ELECTRONICS I LABORATORY (1). Selected laboratory experiments to accompany TECH 276. CRQ: TECH 276.

277. DIGITAL LOGIC DESIGN (3). Design of digital circuits using SSI, MSI, LSI, and VLSI components. Combinational design techniques as well as sequential design techniques are presented with the use of Karnaugh mapping, state transition diagrams and tables, and register transfer language. PRQ: TECH 175. CRQ: TECH 277A.

277A. DIGITAL LOGIC DESIGN LABORATORY (1). Selected experiments in conjunction with TECH 277. CRQ: TECH 277.

294. TECHNOLOGY AND CULTURAL RELEVANCE (3). Development and current status of technology with attention given to developing an understanding of technology as it relates to its various settings and assumptions. Critical examination of these assumptions with an effort at organizing facts and developing meanings of technology in a dynamic society. Technology majors cannot use TECH 294 as a TECH Elective or for general education credit.

295. MANUFACTURING COMPUTER APPLICATIONS (3). Overview of computer hardware, software, and processing concepts related to the control of manufacturing tasks. Emphasis on use of integrated software packages in the solution of a variety of manufacturing problems. Laboratory assignments in automation control, real time data sampling, and creation of user interfaces. PRQ: MATH 155 and TECH 265.

302. GRAPHIC PRESENTATION AND COMMUNICATION (3). Current practices in graphic communication methodology and data presentation. Computer software for preparing documents for technical materials and group presentations. PRQ: TECH 211.

311. COMPUTER-AIDED MODELING (3). Design process in a concurrent engineering environment, migrating from 2-D to 3-D CAD systems. Wireframe, surface, and solid modeling techniques using a popular design package, rapid prototyping. PRQ: TECH 211.

312. DESIGN DIMENSIONING AND TOLERANCING (3). Dimensioning techniques using CAD, limits and fits, material condition modifiers, tolerance stacks, and dimensioning standards. Geometric dimensioning and tolerancing. PRQ: TECH 211 and TECH 260 or TECH 265.

313. PRODUCT DESIGN AND DEVELOPMENT FOR MANUFACTURABILITY (3). Techniques for creating and testing new and enhanced product designs for manufacturability. Development of applications based on reverse design process, mass customization, and product life cycle studies. Design, construction, and evaluation of product prototypes. PRQ: TECH 265 and TECH 311 or TECH 342.

314. TOOL AND DIE DESIGN (3). Role of tool design in manufacturing. Techniques for documenting designs of dies used in industry. Clamping and work-holding principles. Design representations of different types of jigs, fixtures, and gauges. PRQ: TECH 211.

326. FLUID POWER TECHNOLOGY (3). Fluid power principles, devices, materials, and failure analysis. Examination of hydraulic and pneumatic systems with emphasis on compressors, pumps, motors, actuators, fluids, fluid distribution, protective devices, and control components. PRQ: PHYS 150A or PHYS 210 and MATH 230, or consent of department.

331. TRAFFIC SAFETY EDUCATION THEORY (3). Strategies for operating motor vehicles based upon a contemporary analysis of the driving task. Laboratory activities include self-improvement, observation of class, and in-car teaching. PRQ: Valid driver's license with three years of satisfactory driving experience.

333. TRAFFIC SAFETY EDUCATION PRACTICES (3). Curriculum development, teaching practices, and administration of a driver and traffic safety education program. Laboratory activities include teaching in the car and in class and observation of driver education programs. PRQ: TECH 331.

342. MANUFACTURING COMPONENT DESIGN (3). Design of motion components for the manufacturing industry. Includes CAD techniques to study solid modeling and manufacturing components such as gears, cams, and linkages, and their application. PRQ: MATH 230, TECH 211, TECH 212, and TECH 369.

344. MATERIALS AND PROCESSES IN THE PLASTICS INDUSTRY (3). Laboratory demonstrations and experimentation supplemented by reading, reports, and field trips to gain a general appreciation of the materials and processes used to manufacture plastic products. Laboratory experimentation includes a wide variety of small, experimental equipment including injection molding, vacuum forming, heat laminating, thermoforming, casting, and welding.

345. PLASTIC MOLDING PROCESSES (4). Study of plastic molding processes including injection molding, compression molding, transfer molding, extrusion, blow molding, rotational molding, and reaction injection molding. Course includes manufacturing problems, mold analysis, screw design, ancillary equipment, and plastication theory. PRQ: TECH 344.

362. NUMERICAL CONTROL SYSTEMS (3). Principles, techniques, and applications of numerically-controlled machine tools with emphasis on machine-based code/programming using both manual and computer-controlled systems. Laboratory activities required with manual and computerized machine tools. PRQ: CSCI 240 or TECH 395, TECH 360, or consent of department.

364. ADVANCED NUMERICAL CONTROL PROGRAMMING (3). Continuation of TECH 362 in which APT programming techniques are studied, including study of N/C equipment evaluation and justification procedures. PRQ: TECH 362 or consent of instructor.

365. METROLOGY (3). Precision measurement techniques including laboratory experience with optical, electronic, and mechnical comparators, light wave measuring devices, use of precision gage blocks, and surface finish analysis. PRQ: MATH 155 and TECH 211.

369. STRENGTH OF MATERIALS (3). Mechanics of deformable bodies with emphasis on principles of stress and strain; shear and bending moment; torsion, buckling; failure criteria and design concepts. PRQ: MATH 229 with a grade of C or better and TECH 210.

375. CONTROL SYSTEMS (3). Analysis of mathematical models of feedback control systems. Emphasis on controllability and stability using root locus, Bode plot, and Nyquist criterion. PRQ: MATH 230, TECH 271, or consent of department.

376. ELECTRONICS II (3). Linear and non-linear operational amplifier circuits, and active filters. PRQ: MATH 229 with a grade of C or better and TECH 276. CRQ: TECH 376A.

376A. ELECTRONICS II LABORATORY (1). Selected laboratory experiments to accompany TECH 376. CRQ: TECH 376.

377. MICROPROCESSORS AND INTERFACING (3). Analysis of microprocessors with emphasis on architecture, instruction set, state diagrams, machine cycles, and interfacing techniques. PRQ: TECH 277. CRQ: TECH 377A.

377A. MICROPROCESSORS AND INTERFACING LABORATORY (1). Selected laboratory experiments to accompany TECH 377. CRQ: TECH 377.

378. COMMUNICATION SYSTEM DESIGN I (3). Basic theory and application of communication systems. Emphasis on signal representation, modulation/demodulation techniques, and communication circuits. Effects of noise in communication systems. PRQ: MATH 229 with a grade of C or better and TECH 276. CRQ: TECH 378A or consent of department.

378A. COMMUNICATION SYSTEM DESIGN LABORATORY (1). Selected experiments in conjunction with TECH 378. May be repeated to a maximum of 2 semester hours. CRQ: TECH 378.

379. ELECTRIC MACHINES AND TRANSFORMERS (3). Theory, operation, and applications of generators, dc motors, alternators, synchronous motors, induction motors, servo-mechanisms, and transformers. PRQ: MATH 229 with a grade of C or better and TECH 271. CRQ: TECH 379A.

379A. ELECTRIC MACHINES AND TRANSFORMERS LABORATORY (1). Selected laboratory experiments to accompany TECH 379. CRQ: TECH 379.

391. INDUSTRIAL QUALITY CONTROL (3). Techniques of establishing and maintaining quality of product including statistical quality control applications. PRQ: STAT 208 or STAT 301, or consent of department.

393. STRUCTURE AND PROPERTIES OF MATERIALS (3). Comprehensive coverage of different classes of materials, their structure, properties, and industrial uses. PRQ: CHEM 110 and CHEM 111, or CHEM 210T and CHEM 212, and MATH 155.

395. INDUSTRIAL DATA PROCESSING (3). Introductory course designed to acquaint the student in industry and engineering technology with the use of computers in solving engineering problems encountered in industry and engineering. Using application software, students will calculate and plot functions, solve simultaneous equations, perform least-square analysis, and solve problems showing the application of other mathematical functions. PRQ: MATH 155.

398. INDIVIDUAL PROBLEMS IN TECHNOLOGY (1 to 6).
A. General
B. Automation
C. Industrial Systems
D. Drawing
E. Electricity/Electronics
G. Transportation
J. Project Management
K. Industrial Supervision
M. Metals
N. Numerical Control
Q. Quality
R. Mechanical Technology
U. Power Mechanics
V. Safety
W. Woodworking
Y. Plastics
Advanced undergraduate independent study course carried out under departmental supervision. May include research, application of principles, or technical problems. May be repeated. Problems must be defined and accepted by the student's major adviser and the instructor under whom the work will be done prior to registration.

401. ETHICS IN TECHNOLOGY (3). Exploration from the point of view of ethical theory of a number of ethical problems in the work environment encountered by technologists and engineers. Recognizing the moral aspects of business decisions on the personal level and of business institutions on the social level.

402. INDUSTRIAL TRAINING AND EVALUATION (3). History of employee training, kinds of training, training programs, instructional methods, and evaluation procedures.

404. SUPERVISION IN INDUSTRY (3). Principles, methods, and techniques for supervision of people in their work. For supervisory personnel and those preparing for such positions.

405. TECHNOLOGY, A HUMAN ENDEAVOR (3). Analysis of the study of technology for policy-oriented decision makers in various fields. The formative role of technology in the shaping of policy is stressed through lectures, readings, and field experiences.

408. INDUSTRIAL CONFERENCE AND MEETING MANAGEMENT (3). Purposes, advantages, and limitations of planning, leading, developing, and evaluating visual and written materials for conferences and meetings.

409. INTERNSHIP (3 to 6). A work experience program planned for the student lacking full-time experience in industry. The learning situation is organized and supervised cooperatively by the Department of Technology staff and personnel of selected organizations. Learning experiences include obtaining, with the guidance and approval of the department's faculty coordinator, an acceptable type of wage-earning employment where intern-learning experiences are present. A minimum of eight 40-hour work weeks or 320 work hours total is required for each 3 semester hours of credit. May be repeated to a maximum of 6 semester hours. Final report required. PRQ: Junior standing and consent of major adviser and supervising instructor. Internship cannot be used for credit if already employed in that position.

412. TECHNICAL ILLUSTRATION (3). Axonometric, oblique, perspective, and schematic drawing techniques. Exploded, sectional, and conventional assemblies using 3-D CADS, shading, and rendering. Emphasis on illustrating for catalogs, advertising media, service manuals, and installation diagrams. PRQ: TECH 311 or consent of department.

414. COMPUTER-AIDED MACHINE DESIGN (3). Features-based and parametric solid modeling techniques, design principles of machine elements, design for manufacturability, stress, strain, and load distributions, developments in standards for exchange of product design data. PRQ: PHYS 150A, TECH 265, and TECH 311.

420. COMPUTER-INTEGRATED MANUFACTURING (3). Study of computer integrated manufacturing systems utilized by industry, including computer-aided manufacturing, computer-aided design/drafting, computer-aided testing/inspection, and computer-aided process planning. Demonstrations in system integration with programmable controllers, sensors, machine vision, and robotics. PRQ: TECH 175, TECH 175A, TECH 211 and TECH 265, or consent of department.

423. AUTOMATED MANUFACTURING SYSTEMS (3). Study of automated manufacturing systems utilized by industry, including robotics, computer-aided design and manufacturing, computer-aided inspection, and system integration using PLCs, sensors, DAQ systems, and other automation components. Emphasis on laboratory experiences with automated technology. PRQ: TECH 326, TECH 420, and TECH 425, or consent of department.

425. PROGRAMMABLE ELECTRONIC CONTROLLERS (3). Basic concepts and skills needed to install, program, and apply programmable electronic controllers in industry. Discrete and analog input/output (I/O) devices and ladder logic will be studied, including basic and intermediate PLC functions. Experiments in operation, programming, and industrial applications with emphasis on discrete I/Os. PRQ: TECH 175, TECH 175A, TECH 265, TECH 295 or CSCI 240, or consent of department.

427. TESTING METHODS, PROCEDURES, AND SELECTION OF INDUSTRIAL PLASTICS (3). Brief study of some plastics (polymers) including thermoplastics, thermoset and composite materials in addition to study of specific properties of plastics material, standard testing methods/procedures, and product application. PRQ: ENGL 308, TECH 265 or TECH 344, and CHEM 110 or CHEM 210T.

429. PLANT LOCATION, LAYOUT, AND MATERIALS HANDLING (3). Analysis of plant location, layout, and material handling systems in achieving manufacturing/service goals. Different approaches to location, layout, and material handling systems are presented.

430. MICROCONTROLLERS INTERFACING AND APPLICATIONS (3). Introduction to microcontroller-based systems for embedded control applications. Topics include microcontroller programming and interfacing, application of microcontrollers in process control, automation, instrumentation, and communication. PRQ: TECH 377.

431. INDUSTRIAL VENTILATION (3). Application of principles of industrial ventilation for the safety professional. Emphasis on the designing of ventilation to protect workers and the environment. PRQ: CHEM 110, CHEM 111, MATH 155, TECH 245, TECH 434, or consent of department.

432. DISASTER PREPAREDNESS (3). Organization for survival from natural and human-made disasters. Includes topics such as emergency response procedures, communications, training, and abatement as they relate to hazardous waste operations, chemical spills, hazardous materials recognition, risk assessment, site control, monitoring, and personal protective equipment use.

433. TOXICOLOGY FOR INDUSTRY (3). Basic concepts of toxicity as it relates to chemicals used in industrial work places. Assessment of the hazards of chemicals and how to deal with them safely. PRQ: CHEM 110, CHEM 111, MATH 155, TECH 434, and TECH 437.

434. HUMAN FACTORS IN INDUSTRIAL ACCIDENT PREVENTION (3). Survey of human factors principles and techniques used to minimize the frequency and severity of industrial accidents.

435. LEGAL ASPECTS OF SAFETY (3). Study of the development of federal and state legislation and programs relating to worker safety. Analysis of the implication of these laws and programs for industrial safety.

436. DESIGN AND ADMINISTRATION OF INDUSTRIAL SAFETY PROGRAMS (3). Analysis of current problems and trends in the design and supervision of model industrial accident prevention programs. PRQ: TECH 231 or TECH 245, TECH 434, or consent of department.

437. FUNDAMENTALS OF INDUSTRIAL HYGIENE (3). Application of principles of industrial hygiene for the safety specialist, whose role has been greatly expanded by recent federal legislation. Emphasis on stress-producing conditions including noise, ventilation, temperature, radiation, lighting, and their effect on human performance and productivity. PRQ: CHEM 110, CHEM 111, MATH 155, TECH 230, TECH 231, and TECH 434.

438. SAFETY IN TRANSPORTATION SYSTEMS (3). Status of, and rationale for, improvements in safety practices and legislation for the commercial carriers (rail, highway, water, and air transportation). Each student investigates one system in depth.

439. ADVANCED TRAFFIC SAFETY EDUCATION PRACTICES (3). Study of advanced driving performance capabilities, driving strategies and tactics. Emphasis on administrative and instructional practices for advanced driver education programs. PRQ: TECH 331 or consent of department.

440. MONITORING AND EVALUATING WORK ENVIRONMENTS (3). Theory and methodology of sampling airborne contaminants by selection, calibration, and the use of sampling instruments. Detailed examination of human exposure to chemicals, illumination, noise, temperature, and radiation. PRQ: CHEM 110, CHEM 111, PHYS 150A, and TECH 437, or consent of department.

441. HAZARD CONTROL IN INDUSTRIAL OPERATIONS (3). Advanced study of controls for environmental, safety, and health issues. Concepts related to materials handling systems in relation to the design and use of guards and protective devices. Advanced concepts within the realm of safety analysis and applications within industrial settings. Emphasis on OSHA requirements and applications of these requirements to various industrial processes. PRQ: MATH 155, PHYS 150A, TECH 231 and TECH 245, or consent of department.

442. WORK SIMPLIFICATION AND MEASUREMENT (3). Techniques for improving and standardizing methods; procedures for measuring work and developing time standards in production and service activities.

443. ENGINEERING ECONOMY (3). Principles used in the systematic evaluation of the net worth of benefits resulting from proposed engineering and business ventures in relation to the expenditures associated with those undertakings.

444. PRODUCTION CONTROL SYSTEMS (3). Implementation and operation of manufacturing systems including facility planning, quality improvement, labor measurement, production and inventory control systems. Forecasting methods; the design and organization of routings, schedules, and bills-of-material; computer-based materials control; quality and productivity techniques within process and job-lot environments. PRQ: Consent of department.

470. FIBER OPTICS COMMUNICATIONS (3). Fundamentals of fiber optics; fiber optics system components and applications in communication; cellular telephone technology. PRQ: TECH 378.

471. DIGITAL AND DATA COMMUNICATION (3). Coverage of modulation techniques, transmitters, and receivers in digital communication systems. Study of data communication codes, hardware, protocols, and error detection and correction techniques. Introduction to fiber optics communications. PRQ: TECH 378.

472. INTEGRATED CIRCUIT DEVICES (3). Application of linear integrated circuits in communications, instrumentation, control systems, and other related areas in electrical engineering technology. PRQ: TECH 277 and TECH 376.

473. ADVANCED DIGITAL DESIGN (3). Application-oriented perspective to flexible architecture digital design using Field Programmable Gate Arrays (FPGA) and Complex Programmable Logic Devices (CPLD). Topics include principles of firmware-based digital design, circuit prototyping, testing simulation, and implementation using Intel's (Hardware Description Language) modeling and synthesis platform. PRQ: TECH 377 and TECH 377A.

476. INDUSTRIAL CONTROL ELECTRONICS (3). Basic hardware involved in servomechanism and process control systems. Topics include sensors, actuators, signal conditioners, data acquisition systems, power interfaces, and analog and digital controllers. PRQ: TECH 376 and TECH 379, or consent of department.

477. ENGINEERING TECHNOLOGY SENIOR DESIGN PROJECT I (1). Review and integration of all course work completed to define an individual or team project and conduct a preliminary design. PRQ: Senior standing, ENGL 308, TECH 377, TECH 378, and TECH 376, or TECH 369, TECH 342, and TECH 391.

478. ENGINEERING TECHNOLOGY SENIOR DESIGN PROJECT II (3). Design of an electronic/mechanical project to demonstrate the student's comprehension of electronic/mechanical fundamentals and design procedures. Individual or team design projects conducted under the direct supervision of the instructor. PRQ: TECH 477.

479. SPECIAL TOPICS IN ENGINEERING TECHNOLOGY (1 to 3). Current topics of interest. May be repeated to a maximum of 6 semester hours provided no repetition of topic occurs. PRQ: Consent of department.

481. ERGONOMICS (3). Study of the basic human factors in engineering systems with emphasis on human-machine systems in relation to equipment designs and the work environment. Analyses of organization factors relevant to operators at work, including monotony, repetitive work, training, and selection. PRQ: TECH 434, MATH 155, PHYS 150A or PHYS 210, or consent of department.

482. INDUSTRIAL SAFETY ENGINEERING ANALYSIS (3). Practical theories and applications of safety engineering are studied in the industrial environment. Accident investigation and job safety analysis. PRQ: MATH 155, PHYS 150A or PHYS 210, TECH 231, TECH 245, TECH 434, and TECH 441, or consent of department.

483. APPLIED ERGONOMICS (3). Review of physiological, biomechanical, and psychological concepts related to workplace layout, machine tools, and work methods with emphasis on control of over-exertion injuries, control of work-related musculoskeletal disorders through the use of software, and analysis and evaluations of ergonomic problems. Solution of occupational ergonomic problems with presentation of results in class. PRQ: BIOS 311 and TECH 481, or consent of department.

484. ENERGY MANAGEMENT (3). Focus on energy sources, consumption, supply, trends, hazards, control systems, alternatives, conservation techniques, and measurements. Examples drawn from residential, commercial, and industrial systems.

485. INDUSTRIAL RISK MANAGEMENT (3). Study of systems management procedures relating to current issues faced by industrial and commercial sectors. Emphasis on the responsibility of various levels of management, facilities, procedural controls, and human factors in the planning, initiation, and direction of risk management programs. PRQ: MATH 155, PHYS 150A, TECH 231, TECH 245 and TECH 434, or consent of department.

492. MANUFACTURING DISTRIBUTION APPLICATIONS (3). Applications of mass customization principles, flexible manufacturing, and the theory constraints in modern industrial distribution. Examination and assessment of manufacturing supply and distribution channels for increased value in world-class manufacturing environments and compliance with ISO 9000 standards. PRQ: TECH 265 and TECH 391.

494. ENGINEERING AUTOMATION (4). Capstone course covering fundamental principles and applications of project management, team concept, and operations utilizing design and computer graphics, process control with computer logic, CAD/CAM, and automated systems. Team design projects required. PRQ: TECH 496.

496. INDUSTRIAL PROJECT MANAGEMENT (3). Concepts, principles, and skills of project management. Designed to cover a variety of types of project management. Emphasis on computer tools, project management techniques, and accomplishing projects through teams. Analysis of case studies. Culminating team project required. PRQ: TECH 265, TECH 302, TECH 395, and senior status.

497. WORKSHOP IN TECHNOLOGY (1 to 6). Workshop designed for technologists, supervisors, engineers, managers, and administrators studying contemporary technological problems in the public and private sectors. Content varies providing the opportunity to study current problems and issues related to industry and technology. May be repeated to a maximum of 24 semester hours, but no more than 6 semester hours can be applied toward the B.S. degree in technology.

Technology Faculty

Clifford R. Mirman, Ph.D., University of Illinois, Chicago, professor, chair

Youakim Al-Kalaani, D.E.E.E., Cleveland State University, assistant professor

Abul Azad, Ph.D., University of Sheffield (United Kingdom), assistant professor

Radha Balamuralikrishna, Ph.D., Iowa State University, assistant professor

Earl E. Hansen, C.I.E., C.H.C.M., Ed.D., Oklahoma State University, associate professor

Andrew W. Otieno, Ph.D., University of Leeds (Britain), assistant professor

Said Oucheriah, Ph.D., P.E., Cleveland State University, associate professor

Jule D. Scarborough, Ph.D., Ohio State University, Distinguished Teaching Professor

Xueshu Song, Ph.D., P.E., Pennsylvania State University, professor

James R. Stewart, Ph.D., P.E., Texas A&M University, associate professor

Robert Tatara, Ph.D., Northwestern University, visiting assistant professor

Promod Vohra, Ed.D., P.E., Northern Illinois University, professor

College of Health and Human Sciences

Shirley A. Richmond, Ed.D., dean
Mary E. Pritchard, Ph.D., associate dean

The departments and schools of the College of Health and Human Sciences offer baccalaureate programs leading to the degree Bachelor of Science (B.S.). The College of Health and Human Sciences offers a contract major leading to the B.S. degree.

The undergraduate offerings in the College of Health and Human Sciences prepare students for entry into specialized career and professional fields as well as provide academic programs, and in some instances field and clinical programs, for graduate-level study. The Department of Communicative Disorders requires graduate study for career entry at the professional level.

The programs in the College of Health and Human Sciences are affiliated or are in cooperative arrangement with many areas of the community, state and federal agencies, business and industry, and professional organizations. The schools and departments maintain relations with these agencies and institutions for facilitation of mutual information exchange, professional growth, and field and/or internship student experience. Where appropriate, programs in the college meet the requirements of state and national accrediting agencies. Professionally accredited university undergraduate schools/programs include communicative disorders (Educational Training Board, American Speech-Language and Hearing Association); family, consumer, and nutrition sciences (American Dietetics Association, National Council for Accreditation of Teacher Education); nursing (Commission on Collegiate Nursing Education); and physical therapy (American Physical Therapy Association).

The program in clinical laboratory sciences is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. In the School of Family, Consumer, and Nutrition Sciences, the teacher education certification program is approved by the Illinois State Board of Education (ISBE).

College Mission Statement

The mission of the College of Health and Human Sciences is to promote health and well-being through scholarship that integrates teaching, research, and service. Vision: To enhance the lives of individuals, families, and communities across the lifespan.

Department/School Names and Undergraduate Programs Offered

School of Allied Health Professions
B.S. in clinical laboratory sciences [1]
B.S. in health sciences [1]
B.S. in public health
B.S.Ed. in health education

Department of Communicative Disorders
B.S. in communicative disorders

School of Family, Consumer, and Nutrition Sciences
B.S. in nutrition, dietetics, and hospitality administration [1]
B.S. in early childhood studies [1]
B.S. in family and child studies
B.S. in textiles, apparel, and merchandising

Department of Military Science

School of Nursing
B.S. in nursing [1]

Academic Advising

An academic counselor is available in the college office to assist students in interpreting university and college policies and requirements. At the department level, faculty advisers assist students in establishing academic goals and course selection.

Leave of Absence

Students in limited admission programs in the college who must interrupt their enrollment from NIU must consult with their major department or program regarding a leave of absence. Each program maintains specific policies relative to leave of absence requests.

Clinical and Practicum Assignments

Many of the programs in the college require students to complete an internship or other professional experience. These experiences may be on campus or in off-campus affiliated agencies and institutions. Regulations governing such assignments are available in the department/program offices.

Contract Major (B.S.)

The College of Health and Human Sciences offers students the opportunity of constructing individualized programs of study which are different from the university's regular major and minor programs. Such an individualized course of study, termed a contract major, utilizes existing university courses and leads to the degree Bachelor of Science (B.S.). To receive the degree, a student must satisfy all university graduation requirements. The requirement of the contract major replaces the requirement of a regular departmental major. (See the section "University Graduation Requirements.")

The contract major program allows a student with unusual and well defined academic interests to design a major with the advice of a faculty sponsor. The program must be logically structured around a meaningful and interesting theme or topic. The student interested in pursuing a contract major should discuss the matter with an adviser in the department offering the majority of the academic work proposed for inclusion in the program. Program proposals should be submitted to the associate dean of the College of Health and Human Sciences and must be approved by the College Contract Major Committee.

[1] This is a limited admissions program, placement in which is highly competitive. See "Limited Admissions Requirements"

The student who wishes to propose a contract major must

have a cumulative GPA of at least 2.50.

justify the new curriculum and define the goal to be achieved. The college encourages curricula that are professional in orientation and similar to those offered in accredited programs at other universities.

design a multidisciplinary program that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects on or off campus, up to a maximum of 12 semester hours.)

include in the program at least 50 semester hours of course work comprising courses basic to the area of study. No more than 36 semester hours should be taken in any one disciplinary area; at least 15 semester hours must be committed to disciplines in the College of Liberal Arts and Sciences. These 15 semester hours may be included in the contract or may be in addition to the contract. In either case, none of these hours may also be counted toward the general education requirement.

earn at least 30 semester hours of the contract major program in upper-division courses.

A student who completes an approved contract major and all other graduation requirements will receive the degree Bachelor of Science with a contract major in _____ (the theme specified in the contract).

The college reserves the right to deny contract majors that overextend the resources of a department.

B.G.S. Degree

The focus of this program is baccalaureate-level education for health and human sciences professionals holding a professional credential, certificate, or associate degree. This interdisciplinary individualized program of study leads to the degree Bachelor of General Studies (B.G.S.) in health and human sciences. To receive the degree, a student must satisfy all university graduation requirements. The requirement of the B.G.S. major replaces the requirement of a regular departmental major. (See "Other Graduation Requirements.")

Applicants must be health or human sciences professionals who hold a professional credential, certification, or license in a health or human sciences field and have completed an associates degree program or equivalent number of credits. Other professional recognitions in health or human sciences may be considered on an individual basis. Applicants must be eligible for admission to NIU.

The B.G.S. program allows a student with well-defined academic interests to design a major in the health and human sciences with the assistance of a B.G.S. adviser. The student who wishes to earn this B.G.S. degree must

have a cumulative GPA of at least 2.00.

submit a written professional goals statement for approval.

design a multidisciplinary program, with the approval of a B.G.S. adviser, that may be accommodated within existing university resources and facilities.

include in the program at least 50 semester hours of course work comprising courses basic to the area of interest. These 50 semester hours must include at least 30 semester hours in upper-division courses from the College of Health and Human Sciences and must not include more than 24 semester hours from the offerings of a single department in the College of Health and Human Sciences.

complete 30 semester hours at NIU, excluding proficiency credit.

Upon successful completion of these 50 semester hours, the student may be awarded up to 30 semester hours of proficiency credit for the learning experiences and education in the discipline in which he or she holds certification and/or licensure.

A student who completes an approved program and all other graduation requirements will receive the degree Bachelor of General Studies in health and human sciences.

NOTE: The degree Bachelor of General Studies is not as well understood outside the university as traditional baccalaureate degrees. Students earning this degree may be required to convince prospective employers or graduate schools that the degree will enable them to succeed in a health or human sciences related position or pursuit of an advanced degree or certification.

Dean's List Criteria

The College of Health and Human Sciences recognizes undergraduates whose academic performance has been outstanding through the Dean's List. The Dean's List recognizes those students who achieve a GPA of 3.75 or higher (on a 4.00 scale) while completing a minimum of 12 graded semester hours within a fall or spring semester.

Special Requirements

Students who select majors in the College of Health and Human Sciences may need to meet specific requirements for their academic programs and/or entry into their chosen professions, such as a criminal background check, drug testing, immunization, professional liability insurance, cardiopulmonary resuscitation (CPR) certification, uniforms, and equipment. The student is generally responsible for the costs of meeting these requirements.

Gerontology

The gerontology program is an interdisciplinary program that fosters educational, research, and service activities pertinent to aging. The program offers an interdisciplinary undergraduate minor and an interdisciplinary certificate of graduate study. The gerontology minor and certificate allow students to integrate current knowledge and research on adulthood and aging into their degree programs. A degree-program student must apply to the gerontology program. Students must complete a minimum of 15 semester hours with at least 9 semester hours from the primary content area.

Minor in Gerontology (15)

Coordinator: Director, Gerontology Program

A student may take no more than 6 of the required 15 semester hours from a single department. Credit hours applied to satisfy the requirements for a major may not be counted again as satisfying the requirements for an interdisciplinary minor.

Primary Content Area (9-12)

IDSP 465 - Issues in Gerontology (3)
Course work from the following (6-9)
- FCNS 486 - Aging and the Family (3)
- KNPE 454 - Exercise Gerontology (3)
- PSYC 425 - Adult Development and Aging (3)
- SOCI 462 - Aging and Society (3)

Other Courses Related to Gerontology (3-6)

AHPH 410 - Death Education (3)
AHPH 465 - Principles of Long-Term Care Administration (3)
ANTH 465 - Medical Anthropology (3)

*BIOS 109 - Human Biology (3)
*FCNS 280 - Human Development, the Family, and Society (3)
FCNS 310 - Applied Nutrition (3)
IHHS 301[2] - Independent Study in Health and Human Sciences (3)
KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (3)
POLS 326 - Government and Welfare (3)
PSYC 465 - Advanced Developmental Psychology (3)
SOCI 251 - Health, Aging, and Society (3)
SOCI 451 - Medical Sociology (3)
SOCI 460 - Social Structure and the Life Course (3)
SOCI 482 - Sociology of Death and Dying (3)

Interdisciplinary Courses Offered by the College of Health and Human Sciences (IHHS, UHHS)

IHHS 301. INDEPENDENT STUDY IN HEALTH AND HUMAN SCIENCES (1 to 3). Directed independent study and service learning with special opportunities for interprofessional collaboration in health and human sciences, gerontology, and related topics. May be repeated to a maximum of 6 semester hours. PRQ: At least junior standing and consent of college.

IHHS 350. CRITICAL THINKING FOR HEALTH AND HUMAN SERVICES PROFESSIONALS (3). Development of critical thinking skills and dispositions to help students in the College of Health and Human Sciences function and make decisions more powerfully and effectively. Emphasis on critical thinking development through active student participation. PRQ: Admission to an academic program in the College of Health and Human Sciences. Permit only.

IHHS 450. ADMINISTRATION FOR PROFESSIONALS IN HEALTH AND HUMAN SCIENCES (2 to 3). Administrative principles as they pertain to provision of services by professionals working in health and human sciences settings. Topics include departmental supervision, personnel issues, resource management, safety issues, and governmental regulations. PRQ: At least junior standing.'

UHHS 101. ORIENTATION TO HEALTH AND HUMAN SCIENCES (1). Introduction to majors within the College of Health and Human Sciences. Evaluation of students' interests, abilities, and expectations in relation to requirements for completion of majors within the College of Health and Human Sciences.

UHHS 200. EXPERIENCES IN HEALTH AND HUMAN SCIENCES I (3 to 30). Approved introductory experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with UHHS 300, Experiences in Health and Human Sciences II, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of college.

UHHS 300. EXPERIENCES IN HEALTH AND HUMAN SCIENCES II (3 to 30). Approved experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with UHHS 200, Experiences in Health and Human Sciences I, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of college.

UHHS 310. INTRODUCTION TO HEALTH AND HUMAN SCIENCES (3). Overview of health and human sciences including individual, family, and community health and well-being; health and human sciences organizations; and professional practice.

UHHS 410. LEGAL AND ETHICAL ISSUES FOR HEALTH AND HUMAN SCIENCES PROFESSIONALS (3). Evaluation of complex legal and ethical issues in health and human sciences service delivery. Application of professional codes of ethics to clarify appropriate responses to contemporary dilemmas in the health and human sciences. Development of critical thinking about ethical issues. PRQ: Consent of college.

UHHS 430. WORKING WITH DIVERSE POPULATIONS IN HEALTH AND HUMAN SCIENCES (3). Examination of relationships among culture, health, and well-being. Investigation of historical, cultural, social, economic, political, and environmental factors that impact health behavior and health status of diverse groups. Exploration of strategies for culturally and linguistically appropriate service delivery addressing the needs of diverse populations. PRQ: Consent of college.

* Available for general education credit.
[2] When topic is related to gerontology.

School of Allied Health Professions (AH--)

Admission to the majors in clinical laboratory sciences and in health sciences/physical therapy in the School of Allied Health Professions is limited. See "Limited Admissions and Limited Retention Requirements" in the front part of this catalog.

The School of Allied Health Professions offers majors in clinical laboratory sciences, health education, health sciences (the undergraduate component of the physical therapy program), public health, and minors in health education and public health. The school also offers baccalaureate degree completion for people with an Associate of Applied Science degree in specific health-related areas.

Majors in the School of Allied Health Professions who are preparing for professional practice may be dismissed from a program on the basis of either academic deficiencies or nonprofessional performance. Specific criteria relating to these areas are made known to each student at the time the professional phase of a program is initiated.

Clinical Laboratory Sciences Program

Pre-Professional Clinical Laboratory Sciences Program

The School of Allied Health Professions offers a pre-clinical laboratory sciences program designed to prepare students for entrance into a professional clinical laboratory sciences program. All students interested in clinical laboratory sciences and accepted into NIU are admitted into the pre-clinical laboratory sciences program until formally accepted into the professional program. The pre-professional program is a two- to three-year course of study providing prerequisites in the humanities, social sciences, and physical sciences. It is recommended that interested students contact a program adviser.

Pre-professional Courses (37-40)

AHP 318 - Medical Terminology (3)
BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 Fundamentals of Biology I Laboratory (1)
BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 Fundamentals of Biology II Laboratory (1)
BIOS 213 - Introductory Bacteriology (3),
OR BIOS 313 - Microbiology (4)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
CHEM 230 - Introductory Organic Chemistry (3)
CHEM 231 - Introductory Organic Chemistry Laboratory (1)
*CSCI 205 - Introduction to Computing (3),
OR CSCI 210 - Elementary Programming (4)
One mathematics course which meets the core competency requirement (3-4)

Admission

Both admission criteria and procedures are described in the "Admission" section of this catalog and apply to all students interested in clinical laboratory sciences.

General Information

Once admitted into the clinical laboratory sciences program, a student must maintain a grade of C or better in required courses in the school or be subject to dismissal from the program. A student also may be dismissed from the program for unprofessional behavior or for actions which threaten the health and/or safety of patients. All general education courses must be completed before beginning the clinical courses in the hospital.

In addition to the usual costs for a university student, the student will be responsible for the costs involved in

student liability insurance.

cardiopulmonary resuscitation (CPR) certification.

completion of a 3-dose series of Hepatitis B immunization unless proof of immunization is provided. The series should begin as soon as the new transfer student is accepted into the clinical laboratory sciences major or before students at NIU enroll in AHLS 211, Introduction to the Clinical Laboratory Sciences.

transportation to, and room and board for, the clinical course.

Before enrolling in AHLS 470 students must have completed all other university and program requirements for graduation. Additionally, they must have been admitted to the clinical laboratory sciences major and all AHLS 300-level courses must have been completed with a grade of C or better.

B.S. Degree Completion for Clinical/Medical Laboratory Technicians

Clinical or medical laboratory technicians with an associate's degree and appropriate certification as granted by either the National Credentialing Agency or the American Society for Clinical Pathology must demonstrate the competencies required of all pre-clinical laboratory sciences majors. However, once formally admitted into the major and upon successful completion, with a grade of C or better, of the didactic components of AHLS 301, AHLS 302, AHLS 311, AHLS 336, AHLS 337, AHLS 344, AHLS 448, AHP 440, and AHLS 446 or IHHS 450, these students will receive 26 semester hours of proficiency credit.

Individuals who are certified as clinical laboratory technicians and who desire to complete the requirements for the B.S. in clinical laboratory sciences are advised to contact the program coordinator for specific information.

Major in Clinical Laboratory Sciences (B.S.)

The clinical laboratory sciences program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.

Requirements in School (53-61)

AHLS 211 - Introduction to the Clinical Laboratory Sciences (2-3)
AHLS 300 - Urinalysis (1-2)
AHLS 301 - Immunology (2-3)
AHLS 302 - Hematology (2-3)
AHLS 308 - Body Fluids (1)
AHLS 311 - Immunohematology (1-2)
AHLS 312 - Hemostasis (1)
AHLS 336 - Clinical Diagnostic Microbiology (2-3)

* Available for general education credit.

AHLS 337 - Clinical Diagnostic Mycology and Parasitology (1)
AHLS 344 - Clinical Diagnostic Biochemistry (3)
AHLS 345 - Clinical Diagnostic Biochemistry Laboratory (2)
AHLS 446 - Principles of Laboratory Management and Practice (1),
OR IHHS 450 - Administration for Professionals in Health and Human Sciences (3)
AHLS 448 - Introduction to Research in Clinical Laboratory Sciences (2)
AHLS 470 - Topics in Applied Clinical Laboratory Sciences (28)
A. Clinical Hematology (1-6)
B. Clinical Microbiology (1-9)
C. Clinical Biochemistry (1-6)
D. Clinical Serology/Immunology (1-3)
E. Immunohematology (1-3)
J. Urinalysis/Body Fluids (1-3)
K. Clinical Parasitology/Mycology (1-2)
M. Hemostasis (1-2)
N. Special Topics (1-6)
Q. Clinical Pathology Correlation (1)
R. Clinical Microscopy (1-3)
U. Diagnostic Molecular Biology (1-3)
AHP 318 - Medical Terminology (3)
AHP 440 - Introduction to Teaching in the Allied Health Professions (1)

Requirements outside School (37-40)

BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 Fundamentals of Biology I Laboratory (1)
BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 Fundamentals of Biology II Laboratory (1)
BIOS 213 - Introductory Bacteriology (3),
OR BIOS 313 - Microbiology (4)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 General Chemistry Laboratory II (1)
CHEM 230 - Introductory Organic Chemistry (3)
CHEM 231 - Introductory Organic Chemistry Laboratory (1)
CHEM 370 - Introductory Biochemistry (3)
CSCI 205 - Introduction to Computing (3),
OR CSCI 210 - Elementary Programming (4)
One mathematics course which meets the core competency requirement (3-4)

Total Hours for a Major in Clinical Laboratory Sciences: 90-101

Recommendations

Classes in allied health, natural and physical sciences, mathematics, computer science, as well as the social sciences and business may be beneficial. Consultation with program faculty is requested prior to course selection.

To become certified as a clinical laboratory scientist, the graduate of the program must be examined on professional competence by a national certifying body. Completion of the examination, however, is not a prerequisite for the B.S. degree.

Majors must maintain an ongoing active communication with the coordinator for clinical laboratory sciences.

Contract major programs culminating with a B.S. degree in alternative laboratory-related areas are available. See the description of contract major programs in the general information about the College of Health and Human Sciences.

Physical Therapy Program

Pre-Physical Therapy

The School of Allied Health Professions offers an undergraduate pre-physical therapy program designed to prepare students for entrance into the professional physical therapy curriculum. The undergraduate pre-physical therapy program provides prerequisites in the humanities, social sciences, and basic sciences. Because of the complexity of the requirements and the uniqueness of the program at NIU, students must maintain communication with academic advisers in the physical therapy program.

Prerequisite Courses (56-57)

One year of general biology for science majors with laboratory (8)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 General Chemistry Laboratory II (1)
*MATH 155 - Trigonometry and Elementary Functions (3),
OR *MATH 229 - Calculus I (4)
*PHYS 210 - General Physics I (4)
*PHYS 211 - General Physics II (4)
*PSYC 102 - Introduction to Psychology (3)
A lifespan development course (3)
An abnormal psychology course (3)
An introductory statistics course (3)
Course work in an adviser-approved focus area excluding required prerequisites and general education courses (12)

Major in Health Sciences (B.S.)

The B.S. program in health sciences comprises the undergraduate component of the professional physical therapy program. The major has limited enrollment and admission is highly competitive, open only to those students who apply and are accepted into the professional physical therapy curriculum.

Admission

Both admission criteria and procedures described in the "Admission" section of this catalog apply to all students interested in the professional physical therapy curriculum. Admission is based on many factors, including the GPA in the prerequisite courses, the overall GPA, number of hours taken at NIU, references, and an essay. The faculty may require an interview as part of the application process. No transfer credit for courses within the professional program is allowed. Students must complete general education requirements and program prerequisite courses prior to matriculation into the professional curriculum.

General Information

Students must successfully complete both the undergraduate and graduate components of the professional physical therapy curriculum in order to be eligible to sit for the professional licensing examination. Students must make satisfactory progress to be allowed to continue in the program and can be dismissed from the program for academic reasons or for unprofessional behavior or actions that threaten the health and safety of others. It is the responsibility of students to secure a copy of the Physical Therapy Student Handbook which describes the policies of the program.

In addition to the usual costs for a university student, health sciences majors are responsible for the costs involved in

uniforms to be worn during all clinical experiences,
transportation to, and room and board at, clinical facilities,
completion of a 3-dose Hepatitis B immunization,
proof of varicella immunity,
student professional liability insurance, and
professional textbooks.

* Available for general education credit.

Full-time and part-time clinical experiences are an integral part of the curriculum, providing the student opportunities to apply academic knowledge under the supervision of skilled physical therapists. Clinical experiences are offered throughout the central United States and are scheduled by the NIU physical therapy faculty. Students are expected to be involved in both part-time and full-time clinical experiences during the professional curriculum. The timing of these clinical experiences is dependent on available clinical sites.

Requirements in School (46)

AHPT 400 - Introduction to Physical Therapy (2)
AHPT 402 - Physical Therapy and the Health Care System (1)
AHPT 403 - Communication and Patient Education Skills for Physical Therapists (3)
AHPT 404 - Case Studies in Physical Therapy I (1)
AHPT 409 - Physical Therapy Research I (2)
AHPT 410 - Physical Therapy Science I (4)
AHPT 411 - Physical Therapy Science II (4)
AHPT 412 - Physical Therapy Science III (2)
AHPT 413 - Musculoskeletal Basis of Human Movement for Physical Therapists (2)
AHPT 417 - Pathology and Pharmacology for Physical Therapists (3)
AHPT 425 - Motor Development for Physical Therapists (3)
AHPT 440 - Evaluation and Treatment of Musculoskeletal Disorders: Extremities (4)
AHPT 442 - Medical Management of Musculoskeletal Disorders (3)
AHPT 460 - Clinical Experience I (1)
AHPT 461 - Clinical Experience II (3)
AHPT 462 - Clinical Experience III (4)
AHPT 465 - Mock Clinic for Physical Therapists (1)
IHHS 450 - Administration for Professionals in Health and Human Sciences (3)

Requirements outside School (66-67)

Prerequisite courses (56-57)
BIOS 355 - Human Physiology (4)
BIOS 446 - Gross Human Anatomy (6)

Total Hours for a Major in Health Sciences: 112-113

Public Health and Health Education Programs

The School of Allied Health Professions offers majors in Public Health (B.S.) and Health Education (B.S.Ed.), minors in Public Health and Health Education, and a baccalaureate degree completion program (B.S.). Students interested in one of the program's majors or minors should contact the Public Health and Health Education Programs office for advising as early as possible. Failure to do so could result in delayed graduation.

Practical field training is required as part of the public health curriculum and student teaching is a required part of the health education curriculum. Students are advised that they are responsible for their own transportation to and from the training facilities and all costs associated with these activities.

Major in Public Health (B.S.)

The public health program prepares students for professional positions in health administration and general community health. Depending on their particular interests, graduates will be involved in planning and managing health service programs and facilities, developing and communicating health information to the public, and investigating and evaluating specific community and environmental health problems. Students aspiring to major in public health should contact a program adviser as early as possible, preferably during their freshman year, for a preadmission interview and course counseling session. Failure to do so could result in a delayed graduation.

Practical field training is a required part of the public health curriculum. Students are advised that they are responsible for their own transportation to and from the training facilities and all costs associated with these activities.

B.S. in Public Health Completion Program

The B.S. completion program in public health is designed to award credit to practicing health care professionals for their recent education and previous learning experiences in the fields of dental hygiene, respiratory care, radiologic technology, long-term care administration, health information technology, nursing, occupational therapy assistant, physical therapy assistant, speech-language pathology assistant, and surgical technology. With the consent of the departmental adviser, up to 25 semester hours of credit in AHPH 461 may be applied to the area of study in applied professional health sciences. The credit will be held in "escrow" and will be posted to the student's transcript upon the completion of all designated 400-level course work for the public health major, at which time the student will receive credit in AHPH 496, AHPH 497, variable credit in the appropriate section of AHPH 461 (A-N), as well as credit to be determined by the department based on professional course work of the student.

Emphasis 1. General Public Health

The requirements in the school for the general public health emphasis prepare students to take the Certified Health Education Specialist Exam (C.H.E.S.) given by the National Commission for Health Education Credentialing, Inc.

Requirements in School (37)

AHP 295 - Ecology of Health (3)
AHP 318 - Medical Terminology (3)
AHPH 350 - Elements of Environmental Health (3)
AHPH 402 - Community Health Programs and Issues (3)
AHPH 455 - Public Health Epidemiology (3)
AHPH 460 - Principles of the Organization of Public Health and Health Care Programs (3)
AHPH 483 - Public Health Research and Evaluation (3)
AHPH 485 - Principles of Health Planning (3)
AHPH 496 - Public Health Pre-Practicum Seminar (1)
AHPH 497 - Practicum in Public Health (6)
Two of the following with the advice and consent of adviser (6)
  AHP 446 - Supervision in Health Care Facilities (3)
  AHPH 465 - Principles of Long-Term Care Administration (3)
  AHPH 475 - Economic Issues in Public Health (3)
  AHPH 488 - Applied Health Promotion Programming (3)
  AHPH 491 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
  AHPH 495 - Funding for Programs in Public Health (3)

Requirements outside School (41-59)

*BIOS 104 - General Biology (4),
  OR BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 213 - Introductory Bacteriology (3),
  OR BIOS 313 - Microbiology (4)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
  OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)
*CSCI 205 - Introduction to Computing (3),
  OR CSCI 210 - Elementary Programming (4),
  OR ETT 429 - Computers in Classroom Teaching (3)
ENGL 250 - Practical Writing (3)
*SOCI 170 - Introduction to Sociology (3),
  OR *SOCI 250 - Contemporary Social Institutions (3)
SOCI 251 - Health, Aging, and Society (3),
  OR SOCI 451 - Medical Sociology (3),
  OR SOCI 462 - Aging and Society (3),
  OR SOCI 482 - Sociology of Death and Dying (3)

* Available for general education credit.

*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
One of the following areas of study, a minor offered by the School of Family, Consumer, and Nutrition Sciences, or a minor in biological sciences, chemistry, communication studies, communicative disorders, environmental management systems, or psychology (10-25)

Aging and Health (15)

Students must complete the minor in gerontology with a minimum of 15 semester hours toward the minor, which may not be applied toward the major.

Applied Professional Health Sciences (10-25)

This area of study is limited to students with an Associate of Applied Science degree with a major in one of the areas designated above under "B.S. in Public Health Completion Program."

Environment and Health (18)

Course work from the following (18)
- BIOS 205T - Organismal Diversity (3), and BIOS 207 Organismal Diversity Laboratory (1)
- BIOS 208T[1] - Fundamentals of Biology I (3), and BIOS 210 Fundamentals of Biology I Laboratory (1)
- BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 Fundamentals of Biology II Laboratory (1)
- *CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)
- *CHEM 211T - General Chemistry II (3), and *CHEM 213 General Chemistry Laboratory II (1)
- CHEM 230 - Introductory Organic Chemistry (3)
- COMS 361 - Business and Professional Communication (3)
- GEOG 253 - Environment and Society (3)
- GEOG 302 - Soil Science (4)
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 455 - Land-Use Planning (3)
- GEOG 492 - Hydrology (3)
- JOUR 335 - Principles of Public Relations (3)
- *PHYS 210 - General Physics I (4)
- *PHYS 211 - General Physics II (4)
- POLS 324 - Politics of Energy and the Environment (3)
- TECH 434 - Human Factors in Industrial Accident Prevention (3)
- TECH 435 - Legal Aspects of Safety (3)
- TECH 441 - Hazard Control in Industrial Operations (3)

Public Health Promotion (15)

Course work from the following (15)
- AHPH 306 - Human Sexuality (3)
- AHPH 401 - Current Issues: Health Education (1-3)
- AHPH 402 - Community Health Programs and Issues (3)
- AHPH 408 - Mental and Emotional Health (3)
- AHPH 409 - Drug Education (3)
- AHPH 410 - Death Education (3)
- AHPH 411 - Sexuality Education (3)
- AHPH 412 - Consumer Health (3)
- CAHA 400 - The Nature of Adult and Higher Education (3)
- CAHC 400 - Exploration in the Counseling Profession (3)
- COMS 200 - Public Speaking (3)
- COMS 304 - Introduction to Persuasion Theory (3)
- EPS 300 - Educational Psychology (3)

Total Hours for Emphasis 1, General Public Health: 78-91

Emphasis 2. Health Administration

The health administration emphasis prepares students to take the Illinois Nursing Home Administrators Licensing Examination. For details contact the public health program office.

Requirements in School (40)

AHP 295 - Ecology of Health (3)
AHP 318 - Medical Terminology (3)
AHP 446 - Supervision in Health Care Facilities (3)
AHPH 455 - Public Health Epidemiology (3)
AHPH 460 - Principles of the Organization of Public Health and Health Care Programs (3)
AHPH 475 - Economic Issues in Public Health (3)
AHPH 483 - Public Health Research and Evaluation (3)
AHPH 485 - Principles of Health Planning (3)
AHPH 493 - Financial Management of Health Care Organizations (3)
AHPH 496 - Public Health Pre-Practicum Seminar (1)
AHPH 497 - Practicum in Public Health (6)
Two of the following with the advice and consent of adviser (6)
- AHPH 350 - Elements of Environmental Health (3)
- AHPH 402 - Community Health Programs and Issues (3)
- AHPH 465 - Principles of Long-Term Care Administration (3)
- AHPH 491 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
- AHPH 495 - Funding for Programs in Public Health (3)

Requirements outside School (55-62)

To be admitted into required courses in the College of Business and arrange proper sequencing of the program of studies, students in this emphasis should consult with an adviser concerning procedures for special course permits. All prerequisites must be met before enrolling in a course. Failure to arrange proper sequencing of courses could delay graduation.

ACCY 288 - Fundamentals of Accounting (3),
OR ACCY 206 - Introductory Financial Accounting (3), and ACCY 207 - Introductory Cost Management (3)
*BIOS 104 - General Biology (4),
OR BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 213 - Introductory Bacteriology (3),
OR BIOS 313 - Microbiology (4)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)
*CSCI 205 - Introduction to Computing (3),
OR CSCI 210 - Elementary Programming (4),
OR ETT 429 - Computers in Classroom Teaching (3)
*ECON 260 - Principles of Microeconomics (3)
ENGL 250 - Practical Writing (3)
FINA 320 - Principles of Finance (3),
OR OMIS 338 - Principles of Operations Management (3)
*MATH 210 - Finite Mathematics (3),
OR *MATH 229 - Calculus I (4)
MGMT 217 - Legal Environment of Business (3)
MGMT 333 - Principles of Management (3)
MKTG 310 - Principles of Marketing (3)
*PSYC 102 - Introduction to Psychology (3)
*SOCI 170 - Introduction to Sociology (3),
OR *SOCI 260 - Introduction to Social Psychology (3)
SOCI 251 - Health, Aging, and Society (3),
OR SOCI 451 - Medical Sociology (3),
OR SOCI 462 - Aging and Society (3),
OR SOCI 482 - Sociology of Death and Dying (3)
UBUS 223 - Introduction to Business Statistics (3),
OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 2, Health Administration: 95-102

* Available for general education credit.
[1] If not used to fulfill requirements outside school above

Major in Health Education (B.S.Ed.)

Graduates with a B.S.Ed. in health education are qualified to apply for teacher certification and to teach in public or private schools. Those completing the 6-12 entitlement program leading to certification are eligible to be certified to teach grades 6-12. In addition to teaching within the major, graduates of this program may also be qualified to teach other academic areas based on approved minors leading to endorsements. Approved minors extend professional competencies while allowing flexible teaching options for middle and secondary schools.

Students are encouraged to complete an endorsement or a recognized minor in an area such as biology, English, foreign language (French, German, or Spanish), general science, mathematics, physical education, psychology, or a social science. They are also encouraged to seek middle grades endorsement. Additional course work may be necessary.

The B.S.Ed. in health education is the initial professional degree for certified health educators. Primary emphasis is placed on development of the knowledge, concepts, clinical experiences, and professional competencies required of a health education teacher in public and private schools.

Successful completion of the Illinois Certification Testing System (ICTS) Basic Skills Test is required for entry into the health education teacher certification program. The test bulletins and applications are available at the Office of Testing Services and in the programs office. Students who intend to enter a teacher certification program need to take the ICTS Basic Skills Test at the earliest possible date.

Students in the B.S.Ed. degree program must maintain a minimum cumulative GPA of 2.50.

Requirements in School (39-41)

AHP 206 - Contemporary Health Concepts (3)
AHPH 207 - Introduction to Health Education (2)
AHPH 301 - Health Education in the Middle and High School (3)
AHPH 306 - Human Sexuality (3),
  OR AHPH 411 - Sexuality Education (3)
AHPH 307 - Drug Use and Abuse (3),
  OR AHPH 409 - Drug Education (3)
AHPH 400 - Methods and Materials in School Health Education (3)
AHPH 402 - Community Health Programs and Issues (3)
AHPH 405 - Clinical/Field Experience in Health Education (1-3)
AHPH 484 - Middle School Student Teaching in Health Education (6)
AHPH 486 - Secondary School Student Teaching in Health Education (6)
At least two of the following[1] (6)
  AHPH 304 - Colloquium in School Health Education (3)
  AHPH 306 - Human Sexuality (3)
  AHPH 307 - Drug Use and Abuse (3)
  AHPH 401 - Current Issues: Health Education (1-3)
  AHPH 408 - Mental and Emotional Health (3)
  AHPH 409 - Drug Education (3)
  AHPH 410 - Death Education (3)
  AHPH 411 - Sexuality Education (3)
  AHPH 412 - Consumer Health (3)

Requirements outside School (24-25)

BIOS 311 - Functional Human Anatomy (4),
  OR BIOS 357 - Human Anatomy and Physiology (5)
EPFE 400 - Foundations of Education (3),
  OR EPFE 321 - History of American Education (3),
  OR EPFE 410 - Philosophy of Education (3)
EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
ETR 440 - Secondary Classroom Assessment (3)
*FCNS 201 - Human Nutrition (3),
  OR FCNS 405 - Child Health and Nutrition (3)
KNPE 262 - First Aid and CPR (2)
PSYC 219 - Mental Hygiene (3),
  OR PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)

Additional Requirements

See “Teacher Certification Requirements” and program director.

Students seeking middle grades endorsement are required to takeTLCI 422 - Middle School Organization and Instruction (3), and EPS 419 - The Middle School Child (3).

Total Hours for a Major in Health Education (B.S.Ed.): 63-66

Minor in Public Health (18)

The minor in public health is recommended for students in the social, behavioral, and physical sciences; education; or other fields who wish to understand the basic principles, methods, and practices of public health. The program reserves the right to limit the number of minors accepted in any term due to class size limitations.

AHP 295 - Ecology of Health (3)
AHPH 402 - Community Health Programs and Issues (3)
AHPH 455 - Public Health Epidemiology (3)
AHPH 460 - Principles of the Organization of Public Health and Health Care Programs (3)
Two of the following (6)
  AHP 318 - Medical Terminology (3)
  AHPH 350 - Elements of Environmental Health (3)
  AHPH 475 - Economic Issues in Public Health (3)
  AHPH 483 - Public Health Research and Evaluation (3)
  AHPH 485 - Principles of Health Planning (3)
  AHPH 488 - Applied Health Promotion Programming (3)
  AHPH 491 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
  AHPH 493 - Financial Management of Health Care Organizations (3)
  AHPH 495 - Funding for Programs in Public Health (3)

Minor in Health Education (26-28)

This minor prepares the student for health education teaching positions in schools. It also can serve as a foundation for further academic work in school health services and instruction, and in maintenance of a healthful school environment. The minor is designed to meet the minimum standards of the state of Illinois for health educators. Students in a teaching major are permitted to declare this program as a minor. Students planning to minor in health education must have passed the ICTS Basic Skills Test prior to enrolling in 300-level professional health education courses.

Students should plan their programs of study in cooperation with faculty in health education.

*AHP 206 - Contemporary Health Concepts (3)
AHPH 207 - Introduction to Health Education (2)
AHPH 301 - Health Education in the Middle and High School (3)
AHPH 306 - Human Sexuality (3),
  OR AHPH 411 - Sexuality Education (3)
AHPH 307 - Drug Use and Abuse (3),
  OR AHPH 409 - Drug Education (3)
AHPH 400 - Methods and Materials in School Health Education (3)

* Available for general education credit.
[1] Same course cannot be used to complete above requirements.

AHPH 402 - Community Health Programs and Issues (3)
KNPE 262 - First Aid and CPR (2)
Two of the following[1] (4-6)
AHPH 304 - Colloquium in School Health Education (3)
AHPH 306 - Human Sexuality (3)
AHPH 307 - Drug Use and Abuse (3)
AHPH 401 - Current Issues: Health Education (1 to 3)
AHPH 408 - Mental and Emotional Health (3)
AHPH 409 - Drug Education (3)
AHPH 410 - Death Education (3)
AHPH 411 - Sexuality Education (3)
AHPH 412 - Consumer Health (3)
*FCNS 201 - Human Nutrition (3),
OR FCNS 405 - Child Health and Nutrition (3)

Course List

Allied Health Professions (AHP)

AHP 201. SOCIAL AND INDIVIDUAL PATTERNS OF DRUG USE (3). Historic and cross-cultural use of drugs, pharmacology, and the effects of drug use and addiction on individuals and social systems.

AHP 206. CONTEMPORARY HEALTH CONCEPTS (3). Investigation of the complexities of health issues related to lifestyles and the subsequent impact on the family, community, and a pluralistic society at large. Examination of aspects of biomedical and psychosocial theories and practice.

AHP 295. ECOLOGY OF HEALTH (3). Presentation of a conceptual model of health including psychosocial, socioeconomic, sociocultural, and environmental components. Overview of the U.S. health care system and introduction to concepts of public health promotion.

AHP 318. MEDICAL TERMINOLOGY (3). Study of the basic language related to medical science and to the allied health professions incorporating anatomy and physiology and pathophysiology. Emphasis on word analysis using case studies and medical reports.

AHP 440. INTRODUCTION TO TEACHING IN THE ALLIED HEALTH PROFESSIONS (1 to 3). Introduction to principles of learning, instructional strategies, interpersonal relationships, evaluation and instructional design as these topics relate to clinical instruction in the allied health professions.

AHP 444. TOPICS IN ALLIED HEALTH PROFESSIONS (1 to 3). Examination of contemporary issues and problems in the allied health occupations and professions. May be repeated to a maximum of 6 semester hours.

AHP 446. SUPERVISION IN HEALTH CARE FACILITIES (1 to 3). Study of the administration of health care programs with emphasis on the development of administrative and leadership skills, including analysis of problems in supervision for clinical department heads, supervisors, and other health-related mid-management personnel.

Clinical Laboratory Sciences (AHLS)

AHLS 211. INTRODUCTION TO THE CLINICAL LABORATORY SCIENCES (2 to 3). Introduction to the profession of clinical laboratory sciences and to the clinical laboratory scientist's role in the delivery of health care. Introduction to the major work components performed in the clinical laboratory. To be taken by all pre-professional students or majors for 3 semester hours. Students exploring the field or who are clinical laboratory technician graduates (with an associate's degree) may upon approval of the school enroll only in the lecture portion for 2 semester hours. Students electing to take only 2 semester hours may at a later time take the one-hour laboratory portion with consent of the school.

AHLS 300. URINALYSIS (1 to 2). Principles and techniques of urinalysis and basic renal function tests. Examination of the chemical and biological bases for routine laboratory procedures for urine. Development of proficiency in the handling and testing of urine.

AHLS 301. IMMUNOLOGY (2 to 3). Theory and application of general immunology and genetics principles and investigative techniques to clinical immunology as applied in the clinical laboratory. Clinical specimens utilized in laboratory.

AHLS 302. HEMATOLOGY (2 to 3). Principles and investigative techniques of hematology. Examination of the chemical, biological, and technical bases for clinical laboratory procedures and quality assurance strategies. Development of proficiency in hematologic procedures and data interpretation. Clinical specimens utilized in laboratory.

AHLS 308. BODY FLUIDS (1). Principles, techniques, and development of proficiency in handling spinal, seminal, amniotic, and serous fluids. Examination of the chemical and biological bases for routine laboratory procedures for these fluids.

AHLS 311. IMMUNOHEMATOLOGY(1 to 2). Theory and application of genetics and immunologic principles and investigative techniques to immunohematology as applied in the clinical laboratory. Clinical specimens utilized in laboratory.

AHLS 312. HEMOSTASIS (1). Principles and investigative techniques of hemostasis. Examination of the chemical, biological, and technical bases for clinical laboratory procedures and quality assurance strategies. Development of proficiency in hemostatic analyses and data interpretation. Clinical specimens utilized in laboratory.

AHLS 336. CLINICAL DIAGNOSTIC MICROBIOLOGY (2 to 3). Theory and application of general microbiology principles and laboratory techniques to diagnostic microbiology practices as routinely applied in the clinical laboratory. Introductory studies of the processes and clinical laboratory strategies for cultivation/identification of pathogens in the human. Clinical specimens utilized in laboratory. PRQ: BIOS 213 or BIOS 313.

AHLS 337. CLINICAL DIAGNOSTIC MYCOLOGY AND PARASITOLOGY (1). Theory and application of general principles and laboratory techniques for the identification of pathogenic fungi and parasites in the clinical laboratory. Clinical specimens utilized in laboratory.

AHLS 344. CLINICAL DIAGNOSTIC BIOCHEMISTRY (3). Clinical correlations of laboratory results and pathologic processes. Theory of analytical techniques and interpretation of data as applied to clinical conditions.

AHLS 345. CLINICAL DIAGNOSTIC BIOCHEMISTRY LABORATORY (2). Practical laboratory application of theory and analytical techniques in clinical chemistry. Manual and instrumental procedures for assessment of chemical parameters of clinical specimens.

AHLS 446. PRINCIPLES OF LABORATORY MANAGEMENT AND PRACTICE (1). Expansion of skills of the clinical laboratorian who is an expert in the technical and professional operations of the laboratory to include expertise necessary for administrative and management roles for the laboratory. Didactic and practical experiences both in the classroom and via off-campus activities.

AHLS 448. INTRODUCTION TO RESEARCH IN CLINICAL LABORATORY SCIENCES (2). Research in medical/clinical settings. Focus on design and critique of scientific articles and research projects.

AHLS 470. TOPICS IN APPLIED CLINICAL LABORATORY SCIENCES
A. Clinical Hematology (1-6)
B. Clinical Microbiology (1-9)
C. Clinical Biochemistry (1-6)
D. Clinical Serology/Immunology (1-3)
E. Immunohematology (1-3)
J. Urinalysis/Body Fluids (1-3)
K. Clinical Parasitology/Mycology (1-2)
M. Hemostasis (1-2)
N. Special Topics (1-6)
Q. Clinical Pathology Correlation (1)
R. Clinical Microscopy (1-3)
U. Diagnostic Molecular Biology (1-3)
Lecture and laboratory experiences to be directed by clinical laboratory sciences program officials. PRQ: Acceptance into the clinical laboratory sciences major.

* Available for general education credit.
[1] Same course cannot be used to complete above requirement.

AHLS 480. TOPICS IN APPLIED NUCLEAR MEDICINE TECHNOLOGY (1 to 9).
A. Nuclear Medicine Technology Procedures. Principles of asepsis; patient handling and positioning; concepts of pathology and examination indications; diagnostic imaging and non-imaging procedures; tomography; and computer acquisition and processing applications. Critique of case studies. Professional and ethical issues related to the practice of nuclear medicine technology.
B. Clinical Nuclear Medicine. Principles and application of nuclear medicine technology procedures involving the diagnostic, therapeutic, and investigative uses of radionuclides. Supervised clinical practicum at affiliated institutions.
C. Radiation Detection and Safety. Principles of natural and artificial radiation, biological effects, and radioactive decay; radionuclide production; radiation detection, protection, and dosimetry; radionuclide imaging and non-imaging instrumentation including computer acquisition and image reconstruction algorithms; and quality assurance and government regulations pertaining to radioactive materials possession.
D. Radiopharmacy. Principles of radiopharmaceutical chemistry, radiolabeling, preparation, and administration; pharmocokinetics, radiopharmacy design, management, and documentation; and safety issues pertaining to the clinical application of diagnostic and therapeutic radiopharmaceuticals.
Topics offered at affiliated institutions accredited for programs in nuclear medicine technology. PRQ: Acceptance into accredited program in nuclear medicine technology at an affiliated institution.

Physical Therapy (AHPT)

AHPT 400. INTRODUCTION TO PHYSICAL THERAPY (2). Overview of history and philosophy of physical therapy and rehabilitation. Exploration of physical therapy education, medicolegal issues, medical terminology, current issues facing the profession of physical therapy, and the physical therapist's responsibilities to themselves and as a member of the health care team. Development of skill and competence in basic test and measures and professional wellness utilized in the practice of physical therapy. PRQ: Consent of school.

AHPT 402. PHYSICAL THERAPY AND THE HEALTH CARE SYSTEM (1). Examination of current issues and trends in health care delivery and reimbursement patterns as they pertain to the physical therapy profession. PRQ: Consent of school.

AHPT 403. COMMUNICATION AND PATIENT EDUCATION SKILLS FOR PHYSICAL THERAPISTS (3). Application of written and oral communication skills to patient-therapist interactions, including the development of patient interview and professional documentation skills. Overview of educational principles and practices utilized by physical therapists. PRQ: Consent of school.

AHPT 404. CASE STUDIES IN PHYSICAL THERAPY I (1). Development of comprehensive physical therapy treatment programs, considering the influence of individual, family, community, and economic factors. Emphasis on programs for individuals with musculoskeletal dysfunction. PRQ: Consent of school.

AHPT 409. PHYSICAL THERAPY RESEARCH I (2). Introduction to the process of physical therapy research. General concepts of research in clinical settings. PRQ: Consent of school.

AHPT 410. PHYSICAL THERAPY SCIENCE I (4). Development of skill in physical therapy evaluation procedures, including assessment of gait, posture, strength, range of motion, nervous system function, and flexibility. Introduction to theories and applications of exercise. PRQ: Consent of school.

AHPT 411. PHYSICAL THERAPY SCIENCE II (4). Development of skill in selected physical therapy procedures. Emphasis on the importance of safety when performing and teaching these techniques. PRQ: Consent of school.

AHPT 412. PHYSICAL THERAPY SCIENCE III (2). Theory and application of electrotherapeutic modalities in the treatment of physical therapy problems. Emphasis on clinical decision making and treatment program development. PRQ: Consent of school.

AHPT 413. MUSCULOSKELETAL BASIS OF HUMAN MOVEMENT FOR PHYSICAL THERAPISTS (2). Examination of joint structure and function. Emphasis on the relationships between arthrokinematics and osteokinematics. PRQ: Consent of school.

AHPT 415. NEUROLOGICAL BASIS OF HUMAN MOVEMENT (4). Human neuroanatomy and neurophysiology as they apply to the acquisition and control of movement. Emphasis on motor control, postural control and motor learning. Effects of normal and abnormal neurological structures on performance. PRQ: BIOS 208T, BIOS 209T, BIOS 210, BIOS 211, BIOS 355, BIOS 446, and consent of school.

AHPT 417. PATHOLOGY AND PHARMACOLOGY FOR PHYSICAL THERAPISTS (3). Introduction to principles of pathology and pharmacology. Impact of pathology of an illness and pharmacological agents on physical therapy management. PRQ: Consent of school.

AHPT 425. MOTOR DEVELOPMENT FOR PHYSICAL THERAPISTS (3). Examination of changes in body systems and movement patterns throughout the life cycle. Impact of developmental changes on functional abilities. PRQ: Consent of school.

AHPT 436. PHYSICAL THERAPY MANAGEMENT OF INDIVIDUALS WITH ACUTE MEDICAL PROBLEMS (3). Examination of physical rehabilitation during the acute phase of illness. PRQ: Consent of school.

AHPT 437. CARDIOPULMONARY PHYSICAL THERAPY (3). Physical therapy management of individuals with cardiopulmonary disorders. PRQ: Consent of school.

AHPT 440. EVALUATION AND TREATMENT OF MUSCULOSKELETAL DISORDERS: EXTREMITIES (4). Principles and techniques necessary to perform a competent physical therapy evaluation and treatment program for common musculoskeletal dysfunction of the upper and lower extremities. PRQ: Consent of school.

AHPT 442. MEDICAL MANAGEMENT OF MUSCULOSKELETAL DISORDERS (3). Medical diagnosis and treatment of patients with musculoskeletal conditions. PRQ: Consent of school.

AHPT 460. CLINICAL EXPERIENCE I (1). Introduction to the roles and responsibilities of health care professionals in settings across the continuum of health care. Introduction to the process of clinical education. Interviews with and observations of health care professionals within their work settings. S/U grading. Individual transportation required. PRQ: Consent of school.

AHPT 461. CLINICAL EXPERIENCE II (3). Opportunity to practice basic physical therapy evaluation, assessment, and treatment skills in the clinical environment under the supervision of a licensed physical therapist. Emphasis on safety and communication skills. S/U grading. Individual transportation required. PRQ: Consent of school.

AHPT 462. CLINICAL EXPERIENCE III (4). Application of previously learned skills under the guidance of qualified physical therapists. Settings include outpatient orthopedic facilities, skilled nursing or subacute facilities, and community and acute general hospitals. Emphasis on safety, skill in examination, treatment techniques, and communication. S/U grading. Individual transportation required. PRQ: Consent of school.

AHPT 465. MOCK CLINIC FOR PHYSICAL THERAPISTS (1). Application of previously learned skills in laboratory environment with faculty and peer supervision. Physical therapy management of patients including examination, evaluation, and intervention. Emphasis on safety, skill in examination and intervention, written and oral communication, and modeling the role of clinical instructor. S/U grading. PRQ: Consent of school.

Public Health and Health Education (AHPH)

AHPH 207. INTRODUCTION TO HEALTH EDUCATION (2). Philosophy, aims, objectives, and principles of health education. Emphasis on the school health education program. PRQ: Cumulative GPA of at least 2.50. CRQ: AHP 206 or consent of department.

AHPH 301. HEALTH EDUCATION IN THE MIDDLE AND HIGH SCHOOL (3). Emphasis on learning and identifying health needs and problems of middle and high school students. Planning and execution of instruction and evaluation of learning during clinical experiences. PRQ: Cumulative GPA of at least 2.50 and completion of AHP 206 and AHPH 207 with a grade of C or better and successful completion of ICTS Basic Skills Test.

AHPH 304. COLLOQUIUM IN SCHOOL HEALTH EDUCATION (3). Review and critical analysis of health problems and programs, and the development of possible solutions. Emphasis on the planning and execution of instruction and evaluation of learning during clinical experiences. PRQ: AHPH 207, AHPH 301, or consent of department.

AHPH 306. HUMAN SEXUALITY (3). Development of positive attitudes regarding sexuality with emphasis on clarifying values and attitudes about sexuality, and increasing knowledge about human sexual anatomy and physiology, reproduction, and healthful sexual behaviors.

AHPH 307. DRUG USE AND ABUSE (3). Comprehensive study of legal and illegal drug use and abuse including psychological, sociological, and pharmacological aspects. Emphasis on psychoactive drugs and nondrug alternatives that modify mood and behavior.

AHPH 350. ELEMENTS OF ENVIRONMENTAL HEALTH (3). Analysis of environmental health problems and their control. Discussion of the effects of environmental residuals and the organization and administration of environmental health programs. PRQ: A course in college biology and a course in college chemistry.

AHPH 400. METHODS AND MATERIALS IN SCHOOL HEALTH EDUCATION (3). Health education programs in middle and high schools. Methodologies, strategies, materials, and resources for teaching health education. PRQ: AHPH 207, AHPH 301, and three content courses chosen from FCNS 201 or FCNS 405, and AHPH 401-AHPH 412, or consent of department.

AHPH 401. CURRENT ISSUES: HEALTH EDUCATION (1 to 3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

AHPH 402. COMMUNITY HEALTH PROGRAMS AND ISSUES (3). Programs and resources of health agencies, including the role of governmental agencies. Emphasis on relationship between community and school health education programs. PRQ: AHPH 207 or consent of department.

AHPH 405. CLINICAL/FIELD EXPERIENCE IN HEALTH EDUCATION (1 to 3). Clinical/field experience in public school health programs and related health resources under university and public school personnel supervision. Emphasis on health instruction, health environment, and health service. Thirty clock hours of participation required for each semester hour of credit. May be repeated once for a total of 3 semester hours. PRQ: AHPH 400 and consent of program director.

AHPH 408. MENTAL AND EMOTIONAL HEALTH (3). Study of personality traits and interpersonal relationships. Emphasis on development and maintenance of positive mental and emotional health.

AHPH 409. DRUG EDUCATION (3). Development and evaluation of curricula appropriate for school and other settings. Emphasis on issues, techniques, and resources necessary for the health educator to interact within the school, community, and home environments. Examination of theories underlying preventive and rehabilitative substance abuse programs.

AHPH 410. DEATH EDUCATION (3). Study of death as an integral phase of the life cycle. Examination of values and coping behaviors related to death and dying.

AHPH 411. SEXUALITY EDUCATION (3). Emphasis on understanding values and beliefs concerning sexuality and on developing and implementing educational programs in school and community settings.

AHPH 412. CONSUMER HEALTH (3). Examination of issues, information, products, and services that influence the quality of life for the individual and community. Emphasis on skills necessary to assess and select appropriate products and services to maintain or improve health.

AHPH 445. PUBLIC HEALTH PROMOTION (3). Principles and techniques for promoting and maintaining health. Overview of individual and community-level interventions designed to prevent illness/injury and promote well-being. Emphasis on the acquisition and maintenance of health enhancing behaviors and the design of health promoting environments. PRQ: AHP 295 or consent of school.

AHPH 455. PUBLIC HEALTH EPIDEMIOLOGY (3). Principles, concepts, and uses of public health epidemiology. Discussion and application of statistical and epidemiological approaches to studying community health problems. PRQ: A course in college-level statistics.

AHPH 460. PRINCIPLES OF THE ORGANIZATION OF PUBLIC HEALTH AND HEALTH CARE PROGRAMS (3). Comprehensive examination of the organization and functions of health care programs with emphasis on the public health policy issues involved with health care problems. PRQ: AHP 295.

AHPH 461. APPLIED PROFESSIONAL HEALTH SCIENCES(10 to 25).
A. Dental Hygiene
B. Respiratory Care
C. Radiologic Technology
D. Long-Term Care Administration
E. Health Information Technology
G. Nursing
J. Occupational Therapy Assistant
K. Physical Therapy Assistant
M. Speech-Language Pathology Assistant
N. Surgical Technology
Clinical application for practicing health care professionals with an Associate of Applied Science degree in an appropriate health care area. PRQ: Consent of school.

AHPH 465. PRINCIPLES OF LONG-TERM CARE ADMINISTRATION (3). Overview of long-term care services, personnel, and the roles of the administrator. Emphasis on organizational management and operations control. Resident care issues, federal and state regulations, and licensing and certification. PRQ: AHPH 460 or consent of school.

AHPH 475. ECONOMIC ISSUES IN PUBLIC HEALTH (3). Overview of economic issues in health services delivery. Health care system presented as a market mechanism wherein forces of supply strive to achieve an equilibrium with health needs and consumer demands. Description and analysis of relationships between elements of the system such as availability, accessibility, quality of care, and financial efficiency. PRQ: AHP 295. Recommended: ECON 260.

AHPH 480. ETHICAL DECISION MAKING FOR HEALTH PROFESSIONALS (3). Introduction to common ethical dilemmas involved in health services delivery. Emphasis on applied ethical decision making. Formal organizational structures related to ethical dilemmas such as written policies, committee composition, and reporting and documentation requirements. PRQ: Consent of school.

AHPH 483. PUBLIC HEALTH RESEARCH AND EVALUATION (3). Study of the process and models used in research and evaluation in public health. PRQ: A course in statistics.

AHPH 484. MIDDLE SCHOOL STUDENT TEACHING IN HEALTH EDUCATION (6). Student teaching for eight weeks in middle school health education. Also includes seminars of current issues in teaching. Assignments to be arranged with the department coordinator of clinical experiences. See “Teacher Certification Requirements.” PRQ: EPS 406, successful completion of the Subject-Matter Knowledge Test, and consent of department.

AHPH 485. PRINCIPLES OF HEALTH PLANNING (3). Study of the principles and techniques of health planning at both the community and institutional levels. Emphasis on comprehensive public health planning through the formulation of priorities, goals, and objectives. Discussion of forecasting, modeling, and cost-benefit analysis, as well as appropriate procedures for collecting and interpreting data in public health planning. PRQ: AHPH 483.

AHPH 486. SECONDARY SCHOOL STUDENT TEACHING IN HEALTH EDUCATION (6). Student teaching for eight weeks in secondary school health education. Also includes seminars of current issues in teaching. Assignments to be arranged with the department coordinator of clinical experiences. See “Teacher Certification Requirements.” PRQ: EPS 406, successful completion of the Subject-Matter Knowledge Test, and consent of department.

AHPH 488. APPLIED HEALTH PROMOTION PROGRAMMING (3). Discussion of the complex approaches to implementing health promotion programs in the public health field. Material is directed toward individuals anticipating positions in the area of health promotion. PRQ: AHPH 445.

AHPH 491. ASSESSMENT, TREATMENT, AND PREVENTION OF DRUG AND ALCOHOL ADDICTION (3). Drug and alcohol addiction viewed from physiological, interpersonal, and cultural perspectives. Treatment techniques and programs to prevent drug and alcohol addiction.

AHPH 492. BEHAVIORAL AND SOCIAL ASPECTS OF PUBLIC HEALTH (3). Examination of health and disease as psycho-social-behavioral-cultural phenomena from an interdisciplinary perspective. Overview of the types and distributions of diseases within certain communities. Investigation of the relationship between beliefs, behaviors, and health. Study of personal and cultural responses to disease and treatment. Discussion of the relationship between concepts of health and disease and social and personal values.

AHPH 493. FINANCIAL MANAGEMENT OF HEALTH CARE ORGANIZATIONS (3). Study of topics in financial management of health care organizations. Included are important concepts, issues, and skills that administrators need to manage a health care organization effectively. PRQ: ACCY 206 or ACCY 288.

AHPH 494. INDEPENDENT STUDY IN PUBLIC HEALTH AND HEALTH EDUCATION (1 to 3). Independent study under direction of a faculty member in the public health and health education programs. May be repeated to a maximum of 6 semester hours when subject varies. PRQ: Consent of department.

AHPH 495. FUNDING FOR PROGRAMS IN PUBLIC HEALTH (3). Seminar in identifying significant public health problems and preparing competitive grant proposals. Students gain experience in writing and evaluating grant proposals and identifying potential funding agencies. PRQ: Senior standing and consent of school.

AHPH 496. PUBLIC HEALTH PRE-PRACTICUM SEMINAR (1). Preparation for field practicum placements. Ethical and professional conduct, formulation of career goals and practicum objectives, and formalization of practicum site arrangements. PRQ: AHPH 483 or consent of school.

AHPH 497. PRACTICUM IN PUBLIC HEALTH (6). Assignments in a health agency under the supervision of an experienced public health professional. S/U grading. PRQ: AHPH 496 and consent of school.

Allied Health Professions Faculty

Ellen Parham, Ph.D., University of Tennessee, professor emeritus, interim chair
Mary Jo Blaschak, Ph.D., Northwestern University, associate professor
Ngoyi Bukonda, Ph.D., University of Minnesota, associate professor
Dianne M. Cearlock, Ph.D., University of Illinois, professor
James R. Ciesla, Ph.D., University of South Carolina, associate professor
Sarah Conklin, Ph.D., University of Pennsylvania, associate professor
Carolinda Douglass, Ph.D., RAND Graduate School of Policy Studies, associate professor
Jeanne M. Isabel, M.S.Ed., Northern Illinois University, associate professor
Arlene Keddie, Ph.D., University of Texas, assistant professor
Daniel Klein, Ph.D., Southern Illinois University, associate professor
Nancy A. Nuzzo, Ph.D., University of Illinois, associate professor
Angela Odoms-Young, Ph.D., Cornell University, assistant professor
William A. Oleckno, H.S.D., Indiana University, Distinguished Teaching Professor, emeritus
Judith Rabak-Wagener, Ph.D., University of Wisconsin, associate professor
Sherilynn F. Spear, Ph.D., University of Iowa, professor emeritus
Tomas Tamulis, Ph.D., University of South Florida, assistant professor
Maribel Valle, Ph.D., University of Ilinois, Chicago, assistant professor
Gail S. Williams, Ph.D., Rush Graduate College, assistant professor

Department of Communicative Disorders (COMD)

Students in communicative disorders must arrange a conference with the departmental admitting officer prior to declaration of this major in order to learn of the minimal requirements for such practice and to become aware of the practicum admission, dismissal, and exclusion policies.

Major in Communicative Disorders (B.S.)

Emphasis 1. Speech-Language Pathology/ Audiology

Students in this emphasis are usually preparing for professional practice as either audiologists or speech-language pathologists. The undergraduate curriculum provides the requirements preparatory to graduate study in the professional areas. Minimal requirements are those prescribed for the Certificate of Clinical Competence of the American Speech-Language-Hearing Association. Students planning for employment in the public schools should also become familiar with the requirements of the Illinois State Board of Education for the Type 73 certificate as a specialist in speech-language impaired.

Requirements in Department (49)

COMD 220 - Introduction to Communicative Disorders (3)
COMD 221 - Phonetics and Phonology (3)
COMD 323 - Anatomy and Physiology of the Speech and Hearing Mechanisms (4)
COMD 325A - Introduction to Hearing Science (3)
COMD 325B - Introduction to Hearing Science Laboratory (1)
COMD 326A - Introduction to Speech Science (3)
COMD 326B - Introduction to Speech Science Laboratory (1)
COMD 403 - Language Development in Children (3)
COMD 420 - Introduction to Audiology (3)
COMD 421 - Aural Rehabilitation (4)
COMD 423 - Developmental Speech and Language Disorders (3)
COMD 424 - Stuttering (3)
COMD 425 - Neuropathologies of Speech and Language (3)
COMD 427 - Introduction to Speech-Language Practicum (1)
COMD 428 - Introduction to Hearing Practicum (1)
COMD 429 - Assessment Procedures in Communicative Disorders (4)
COMD 430 - American Sign Language I (3)
One of the following (3)
  COMD 327 - Introduction to Deafness Rehabilitation (3)
  COMD 493 - Counseling in Communicative Disorders (3)
  COMD 495 - Families and Communicative Disorders: A Rehabilitative Perspective (3)

Requirements outside Department (27-38)

*BIOS 109 - Human Biology (3),
  OR BIOS 357 - Human Anatomy and Physiology (5)
ENGL 207 - Fundamentals of English Grammar (3)
EPS 300 - Educational Psychology (3)
*MATH 210 - Finite Mathematics (3), and MATH 110 - College Algebra (3),
  OR *MATH 155 - Trigonometry and Elementary Functions (3),
  OR *MATH 229 - Calculus I (4)
*PSYC 102 - Introduction to Psychology (3)
*PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
*STAT 208 - Basic Statistics (3),
  OR STAT 301 - Elementary Statistics (4)
One of the following (3)
  FCNS 486 - Aging and the Family (3)
  IDSP 465 - Issues in Gerontology (3)
  PSYC 425 - Adult Development and Aging (3)
  SOCI 251 - Health, Aging, and Society (3)
  SOCI 462 - Aging and Society (3)
One of the following (3-4)
  *PHYS 150 - Physics (3)
  *PHYS 150A - Physics (4)
  *PHYS 180 - Acoustics, Music, and Hearing (3)
  *PHYS 210 - General Physics I (4)
  *PHYS 211 - General Physics II (4)

Total Hours for Emphasis 1, Speech-Language Pathology/ Audiology: 76-87

Emphasis 2. Deafness Rehabilitation

Students in this emphasis are usually preparing as paraprofessionals or professionals providing human/social services to deaf and hard-of-hearing persons. The required courses provide a basic background in speech-language and hearing sciences with additional study of basic psychological principles and statistics; communication skills for use with deaf persons; and an introduction to counseling techniques. Paraprofessional positions (e.g., job coach, rehabilitation aide) can be obtained by students with the baccalaureate degree. Students desiring professional positions must obtain a master's degree. The undergraduate curriculum is preparatory to graduate study which meets the course requirements of the Commission on Rehabilitation Counseling Certification.

Requirements in Department (35)

COMD 220 - Introduction to Communicative Disorders (3)
COMD 323 - Anatomy and Physiology of the Speech and Hearing Mechanisms (4)
COMD 327 - Introduction to Deafness Rehabilitation (3)
COMD 403 - Language Development in Children (3)
COMD 420 - Introduction to Audiology (3)
COMD 426 - Introduction to Clinical Procedures in Deafness Rehabilitation (1)
COMD 430 - American Sign Language I (3)
COMD 431 - American Sign Language II (3)
COMD 432 - American Sign Language III (3)
COMD 482 - Post-Employment Services in Vocational Rehabilitation (3)
COMD 492 - Medical Aspects of Disability in Rehabilitation (3)
COMD 493 - Counseling in Communicative Disorders (3)

Requirements outside Department (42-50)

AHP 318 - Medical Terminology (3)
*MATH 210 - Finite Mathematics (3), and MATH 110 - College Algebra (3),
  OR *MATH 155 - Trigonometry and Elementary Functions (3),
  OR *MATH 229 - Calculus I (4)
*PSYC 102 - Introduction to Psychology (3)
*PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
*STAT 208 - Basic Statistics (3),
  OR STAT 301 - Elementary Statistics (4)
Course work from the following, chosen with adviser's assistance, from at least three departments (27)

* Available for general education credit.

AHPH 445 - Public Health Promotion (3)
AHPH 488 - Applied Health Promotion Programming (3)
AHPH 491 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
CAHC 211 - Career Planning (3)
CAHC 400 - Exploration in the Counseling Profession (3)
CAHC 410 - Foundations of Career Education (3)
COMD 421 - Aural Rehabilitation (4)
COMD 480 - Practicum: Deafness Rehabilitation Services (3)
EPS 300 - Educational Psychology (3)
ETR 434 - Assessing Students with Special Needs (3)
FCNS 230 - Child Development (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 438 - Parent Education (3)
FCNS 484 - Family Theories (3)
FCNS 486 - Aging and the Family (3)
*IDSP 200 - Racism in American Culture and Society (3)
*IDSP 211 - Educating for Cultural Sensitivity (3)
ILAS 444 - Comparative Urbanization (3)
KNPE 490 - Adapted Physical Education (3)
KNPE 492 - Special Physical Education Clinic Practicum (1-2)
MGMT 333 - Principles of Management (3)
MGMT 335 - Organizational Behavior (3)
MGMT 355 - Human Resource Management (3)
PSYC 324 - Developmental Child Psychology (3)
PSYC 332 - Personality (3)
PSYC 360 - Motivation (3)
PSYC 372 - Social Psychology (3)
PSYC 424 - Adolescent Development (3)
PSYC 425 - Adult Development and Aging (3)
PSYC 426 - Theories of Personality (3)
PSYC 471 - Industrial-Organizational Psychology (3)
PSYC 472 - Group Processes (3)
PSYC 473 - Social Judgment (3)
SOCI 251 - Health, Aging, and Society (3)
SOCI 270 - Social Problems (3)
SOCI 354 - Families and Social Change (3)
SOCI 361 - Race and Ethnic Relations (3)
SOCI 454 - Racial and Ethnic Minority Families (3)
SOCI 457 - Families in Global Perspective (3)
SOCI 461 - Intergroup Relations (3)
SOCI 462 - Aging and Society (3)
TLSE 240 - Introduction to Special Education (3)
TLSE 458 - Vocational Preparation and Transition Planning for Adolescents with Disabilities (3)

Total Hours for Emphasis 2, Deafness Rehabilitation: 77-85

Minor in Communicative Disorders (21)

COMD 220 - Introduction to Communicative Disorders (3)
Electives in communicative disorders, with at least 12 semester hours from 300- and 400-level courses, to be selected in consultation with an adviser (18)

Six or more semester hours in the minor must be taken at NIU.

Course List

200. DISABILITY IN SOCIETY (3). Overview of disability from personal, philosophical, sociological, psychological, medical, and legal perspectives. Emphasis on understanding disability within a minority-group model as defined by shared experiences of stigmatization and oppression.

220. INTRODUCTION TO COMMUNICATIVE DISORDERS (3). Overview of speech, language, and hearing processes and disorders. Discussion of the professional and scientific roles of speech-language pathologists, audiologists, and rehabilitation counselors as well as the implications of assisting individuals with communicative disorders in social, educational, and vocational settings.

221. PHONETICS AND PHONOLOGY (3). Speech sound production and structure of the sound system of the English language. Phonetic transcription and analysis of phonological patterns for clinical application.

323. ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISMS (4). Human anatomy and physiology of those structures and functions involved in the expressive and receptive aspects of oral communication. PRQ: BIOS 109 or BIOS 357.

325A. INTRODUCTION TO HEARING SCIENCE (3). Physical acoustics, the normal auditory process, and psychophysical processes relevant to audition. PRQ: BIOS 109 or BIOS 357; PHYS 150 or PHYS 150A or PHYS 180 or PHYS 210 or PHYS 211. CRQ: COMD 323 and COMD 325B.

325B. INTRODUCTION TO HEARING SCIENCE LABORATORY (1). Laboratory experience in acoustics and psychophysical processes. CRQ: COMD 325A.

326A. INTRODUCTION TO SPEECH SCIENCE (3). Survey of perceptual, physiological, and acoustical analysis of speech and the relations of these to phonetic theory. Laboratory experience in the analysis of speech will be provided. PRQ: COMD 221, COMD 325A, and COMD 325B. CRQ: COMD 323 and COMD 326B.

326B. INTRODUCTION TO SPEECH SCIENCE LABORATORY (1). Laboratory experience in the analysis of speech. PRQ: COMD 221, COMD 325A, and COMD 325B. CRQ: COMD 323 and COMD 326A.

327. INTRODUCTION TO DEAFNESS REHABILITATION (3). Survey of various fields and professions providing rehabilitation and related services to persons who are deaf and hard-of-hearing. CRQ: COMD 426.

403. LANGUAGE DEVELOPMENT IN CHILDREN (3). *Crosslisted as LTLA 403X.* Overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence. CRQ: ENGL 207.

420. INTRODUCTION TO AUDIOLOGY (3). Introduction to the profession of audiology and clinical procedures; etiology and diagnosis of auditory disorders. PRQ: COMD 323, COMD 325A, and COMD 325B, or consent of department.

421. AURAL REHABILITATION (4). Methods and materials for communication assessment and training with the hearing impaired. Emphasis on receptive communication including speechreading, auditory training, and amplification systems. PRQ: COMD 221, COMD 326A, COMD 326B, and COMD 420.

423. DEVELOPMENTAL SPEECH AND LANGUAGE DISORDERS (3). Disorders of speech and language in special populations; observations and clinical problem solving. PRQ: COMD 221 and COMD 403.

424. STUTTERING (3). Introduction to the identification and measurement of stuttering. Examination of theories of the onset and development of stuttering with some discussion of evaluation and treatment procedures.

425. NEUROPATHOLOGIES OF SPEECH AND LANGUAGE (3). Neurological bases of speech-language production and disorders including sensory organization, neuromotor control, central language mechanisms, and clinical syndromes associated with central and peripheral nervous system dysfunction. PRQ: COMD 323 or consent of department.

426. INTRODUCTION TO CLINICAL PROCEDURES IN DEAFNESS REHABILITATION (1). Introduction to, discussion of, and observation of clinical procedures employed in provision or rehabilitation and related service to persons who are deaf and hard-of-hearing. PRQ: Consent of department. CRQ: COMD 327.

427. INTRODUCTION TO SPEECH-LANGUAGE PRACTICUM (1). Observation, discussion, and clinical practice of assessment and therapeutic procedures. All majors involved in on-campus practicum in speech-language pathology must enroll in this course. May be repeated to a maximum of 6 semester hours. PRQ: COMD 423 and senior standing.

* Available for general education credit.

428. INTRODUCTION TO HEARING PRACTICUM (1). Observation, practice, and discussion of diagnostic and rehabilitative audiological procedures. All students involved in on-campus practicum in audiology must enroll in this course. May be repeated to a maximum of 6 semester hours. PRQ: COMD 420 or consent of department.

429. ASSESSMENT PROCEDURES IN COMMUNICATIVE DISORDERS (4). Fundamental concepts underlying the evaluation of communicative disorders. PRQ: COMD 220 and STAT 208 or STAT 301. CRQ: Junior status.

430. AMERICAN SIGN LANGUAGE I (3). Development of receptive and expressive skills in American Sign Language. Emphasis on developing skills in a non-English syntax system and communication with deaf and hard of hearing people in activities of daily living. Three hours of lecture and one hour of laboratory. Not recommended for freshmen and sophomores. PRQ: Consent of department.

431. AMERICAN SIGN LANGUAGE II (3). Continuation of COMD 430 emphasizing the improvement of communicative skills. Three hours of lecture and one hour of laboratory. PRQ: COMD 430 or consent of department.

432. AMERICAN SIGN LANGUAGE III (3). Continuation of COMD 431, with emphasis on developing fluency in American Sign Language. Three hours of lecture and one hour of laboratory. PRQ: COMD 431 or consent of department.

476. CHILD LANGUAGE DISORDERS (3). Assessment of and intervention with the high-incidence population of otherwise-normal language impaired children from infancy through adolescence including those from multicultural backgrounds. PRQ: COMD 403 or consent of department.

480. PRACTICUM: DEAFNESS REHABILITATION SERVICES (3). Supervised practicum in deafness rehabilitation services to include rehabilitation agency/facility visits, discussion and observation of service provision, and entry level experience in the field of vocational rehabilitation. PRQ: Junior or senior standing and consent of department.

481. WORKSHOP: AMERICAN SIGN LANGUAGE (1). Opportunities to increase sign language comprehension and expressive abilities through activities and training exercises. Non-verbal format; active student participation emphasized.

482. POST-EMPLOYMENT SERVICES IN VOCATIONAL REHABILITATION (3). Overview of the systems and accommodative techniques for providing post-employment services (e.g., job coaching) to people with the most severe disabilities. Emphasis on the provision of post-employment services to deaf, deaf/blind, and hard-of-hearing persons. PRQ: COMD 327.

490. SENIOR SEMINAR (3). Introduction to research topics in communicative disorders with discussion of research questions and methodologies. Participation in a research project under faculty direction required. PRQ: Senior status, with a GPA of 3.30 or higher at the completion of 90 hours, or consent of department.

491. MICROCOMPUTER USES IN COMMUNICATIVE DISORDERS (3). Overview of microcomputer applications in the assessment and treatment of speech and hearing disorders, and related production of reports, data, and files. Use of appropriate software available in the field of clinical evaluation, therapy exercises, report writing, and clinical data files. Development of clinically oriented programs in BASIC language.

492. MEDICAL ASPECTS OF DISABILITY IN REHABILITATION (3). A rehabilitative perspective on the structure of medicine in the United States, medical specialities, medical terminology, and the medical examination. Survey of select body systems, functions, basic etiologies, pathologies, and treatments intended to provide the rehabilitation counselor with basic information with which to determine eligibility and interpret case-related medical reports.

493. COUNSELING IN COMMUNICATIVE DISORDERS (3). Counseling principles and techniques as related to assessment, treatment, parent conferences, staffings, and eliciting parent/client cooperation.

494. WORKSHOP IN COMMUNICATIVE DISORDERS (1 to 3). Application of principles of communicative disorders or rehabilitation to problems of special interest to the participant. May be repeated to a maximum of 9 semester hours.

495. FAMILIES AND COMMUNICATIVE DISORDERS: A REHABILITATIVE PERSPECTIVE (3). Application of systemic epistemology to the habilitation and rehabilitation of communicative disorders. Survey of major family treatment concepts, models, and techniques as applied to communicative disorders and deafness rehabilitation counseling. Opportunity to develop a personally useful model of family-focused intervention.

498. TUTORIAL IN COMMUNICATIVE DISORDERS (1 to 3). Directed individual study and research in special areas of communicative disorders. May be repeated to a maximum of 6 semester hours. Open to undergraduate students only. PRQ: Consent of department.

Communicative Disorders Faculty

Sue E. Ouellette, Ph.D., Kent State University, professor, chair
Nancy M. Castle, Ph.D., Northern Illinois University, professor
Deborah L. Gough, Ed.D., Northern Illinois University, associate professor
Pamela A. Hadley, Ph.D., University of Kansas, associate professor
Kelly D. Hall, Ph.D., University of Illinois, associate professor
Pamela Jackson, Ph.D., Purdue University, professor
Gregory A. Long, Ph.D., University of Kansas, professor
Sherrill R. Morris, Ph.D., University of Kansas, assistant professor
Jodell Newman-Ryan, Ph.D., University of Texas, Dallas, associate professor
Matthew Rispoli, Ph.D., Columbia University, associate professor
Howard D. Schwartz, Ph.D., Syracuse University, associate professor
Earl J. Seaver III, Ph.D., University of Iowa, professor
Joseph Smaldino, Ph.D., University of Florida, professor

School of Family, Consumer, and Nutrition Sciences (FCNS)

Admission to the major in family and child studies and to the interdisciplinary major in early childhood studies is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

The School of Family, Consumer, and Nutrition Sciences prepares professionals who support families and individuals in meeting their basic human needs. The programs are based on an interdisciplinary approach, drawing on the behavioral sciences, natural sciences, and the humanities. Students learn theories and their application to professions in nonprofit organizations, private practice, government, education, and business. Graduates have the necessary foundation for a career as well as further study. Students majoring in a program offered by the school may obtain certification to teach family and consumer sciences/home economics at the secondary level.

School Requirement

The student must be in good standing at NIU to declare a major or premajor in the School of Family, Consumer, and Nutrition Sciences.

Policy on Dismissal

University policy requires that students be informed of the possibility of being dismissed from practicums, internships, and early field experiences. In the School of Family, Consumer, and Nutrition Sciences, such a possibility exists in FCNS 240, FCNS 341, FCNS 344, FCNS 431A, FCNS 431B, FCNS 431C, FCNS 431D, FCNS 474, FCNS 475, FCNS 490, TLEC 485A, and TLEC 485B. A statement of grounds for dismissal is available from the coordinator of each internship.

The School of Family, Consumer, and Nutrition Sciences standards committee may review a student who displays behavior that threatens the health and/or safety of others in settings such as a major class, practicum, internship, or school-related activity.

Recommendation

Students who plan to major in a program offered by the School of Family, Consumer, and Nutrition Sciences should take chemistry and biology in high school.

Comprehensive Major in Family and Child Studies (B.S.)

All emphases in this major have an applied as well as a theoretical orientation. The major emphasizes a developmental life-span approach to individual and family change. The influence of family and individual development on one another is the guiding principle in all programs.

Emphasis 1. Family and Individual Development

This emphasis provides career enhancement for students who have prior work experience with individuals and/or families, or who plan to pursue a career in secondary education, or higher education in family and child studies and related fields. It is recommended as preparation for advanced degrees in related fields with a research rather than a service focus.

Requirements in School (30)

FCNS 180 - Personal Development and the Family (3),
  OR FCNS 280 - Human Development, the Family, and Society (3)
FCNS 201 - Human Nutrition (3),
  OR FCNS 285 - Introduction to Family Life Education (3),
  OR FCNS 405 - Child Health and Nutrition (3),
  OR AHPH 306 - Human Sexuality (3),
  OR AHPH 409 - Drug Education (3)
FCNS 230 - Child Development (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 343 - Family Financial Planning (3)
FCNS 445 - Management of Human and Family Resources (3)
FCNS 484 - Family Theories (3)
Three of the following (9)
  FCNS 384 - Asian American Families (3)
  FCNS 432 - Theories of Child Development (3)
  FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
  FCNS 438 - Parent Education (3)
  FCNS 486 - Aging and the Family (3)
  FCNS 489 B-E - Topical Issues in Family and Child Studies (3)

Requirements outside School (21-23)

One of the following in consultation with adviser (3)
  ENGL 250 - Practical Writing (3)
  IHHS 350 - Critical Thinking for Health and Human Services Professionals (3)
  *MATH 155 - Trigonometry and Elementary Functions (3)
  *MATH 210 - Finite Mathematics (3)
  *MATH 211 - Calculus for Business and Social Science (3)
  *MATH 229 - Calculus I (4)
  *PHIL 105 - Critical Reasoning (3)
  PSYC 305 - Research Methods (3)
*PSYC 102 - Introduction to Psychology (3)
PSYC 316 - Introduction to Psychopathology (3),
  OR PSYC 465 - Advanced Developmental Psychology (3),
  OR CAHC 400 - Exploration in the Counseling Profession (3)
PSYC 424 - Adolescent Development (3),
  OR EPS 307 - Development of the Adolescent (3)
*SOCI 170 - Introduction to Sociology (3)
*SOCI 260 - Introduction to Social Psychology (3),
  OR PSYC 372 - Social Psychology (3)
*STAT 208 - Basic Statistics (3),
  OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 1, Family and Individual Development: 51-53

Emphasis 2. Family Social Services

This emphasis is intended for students who seek entry-level employment in family service, family life education, mental health, or community welfare agencies which serve primarily older children, adolescents, adults, couples, and/or the elderly. It is recommended as preparation for advanced degrees in social work, family and child studies, marriage and family therapy, and related fields.

Requirements in School (40)

FCNS 180 - Personal Development and the Family (3)
FCNS 201 - Human Nutrition (3),
  OR FCNS 285 - Introduction to Family Life Education (3),

* Available for general education credit.

OR FCNS 405 - Child Health and Nutrition (3),
OR AHPH 306 - Human Sexuality (3),
OR AHPH 409 - Drug Education (3)
FCNS 280 - Human Development, the Family, and Society (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 343 - Family Financial Planning (3)
FCNS 382 - Group Process and Personal and Family Functioning (3)
FCNS 383 - Clinical Applications in Family Social Services (3)
FCNS 431B - Internship: Family Services (7)
FCNS 445 - Management of Human and Family Resources (3),
OR POLS 331 - Public Administration (3),
OR MGMT 333 - Principles of Management (3)
FCNS 481 - Professional Practices in Family Social Services (3),
OR POLS 326 - Government and Welfare (3)
FCNS 484 - Family Theories (3)
One of the Following (3)
FCNS 384 - Asian American Families (3)
FCNS 438 - Parent Education (3)
FCNS 486 - Aging and the Family (3)
FCNS 489B-E - Topical Issues in Family and Child Studies (3)
PSYC 316 - Introduction to Psychopathology (3)
SOCI 454 - Racial and Ethnic Minority Families (3)

Requirements outside School (18-20)

One of the following in consultation with adviser (3)
ENGL 250 - Practical Writing (3)
IHHS 350 - Critical Thinking for Health and Human Services Professionals (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
*MATH 229 - Calculus I (4)
*PHIL 105 - Critical Reasoning (3)
PSYC 305 - Research Methods (3)
*PSYC 102 - Introduction to Psychology (3)
PSYC 424 - Adolescent Development (3),
OR EPS 307 - Development of the Adolescent (3)
*SOCI 170 - Introduction to Sociology (3)
*SOCI 260 - Introduction to Social Psychology (3),
OR PSYC 372 - Social Psychology (3)
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 2, Family Social Services: 58-60

Special Requirements

Students must be admitted to the emphasis before enrolling in FCNS 382. Students should apply for admission prior to the second semester of their sophomore year or upon entry to the university to allow for a more timely graduation without delays due to course sequences.

A grade of C or better in FCNS 180 is a prerequisite for enrollment in FCNS 382, a grade of C or better in FCNS 382 is a prerequisite for enrollment in FCNS 383. Prerequisites for enrollment in the internship FCNS 431B are an overall GPA of at least 2.20 in NIU course work at the time of application for the internship, completion of FCNS 180, FCNS 382, and FCNS 383 with a grade of C or better, senior standing, 100 certified hours of approved community service in social service agencies, proof of liability insurance, and consent of the school. Application is required in September for internships during the following spring and summer terms. Students must complete FCNS 431B with a grade of C or better.

Students not meeting the requirements for entry into the internship may, with the consent of the school, change to Emphasis 1, Family and Individual Development, in order to complete graduation requirements.

Emphasis 3. Child Development

This emphasis provides preparation for professionals who serve infants, toddlers, and young children and their parents in parent-child programs both home- and community-based, in programs for parents and expectant parents, in child-life, early intervention, and early childhood education programs, and in leadership/advocacy positions. It is recommended as preparation for advanced degrees in child development, family and child studies, and related fields.

Requirements in School (48)

FCNS 230 - Child Development (3)
FCNS 231 - An Observational Approach to the Study and Assessment of Young Children (3)
FCNS 280 - Human Development, the Family, and Society (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 330 - Principles of Guiding Young Children (3)
FCNS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
FCNS 332 - Inclusive Program Planning for Children 3-8 Years of Age and Their Parents (3)
FCNS 432 - Theories of Child Development (3)
FCNS 489C - Topical Issues in Family and Child Studies: Child Abuse and Neglect (3)
FCNS 490 - Practicum in Infant and Child Development Laboratories (12)
One of the following areas of study (9)

Parent/Infant Specialist (9)

FCNS 384 - Asian American Families (3),
OR FCNS 434 - Administration and Supervision of Programs for Young Children (3),
OR FCNS 489 - Topical Issues in Family and Child Studies: Working with Ethnically Diverse Children and Families (3)
FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
FCNS 439 - Infant Development in the Family: Typical and Atypical (3)

Child Life Specialist (9)

Three of the following (9)
AHP 318 - Medical Terminology (3)
EPS 307 - Development of the Adolescent (3)
FCNS 405 - Child Health and Nutrition (3)
FCNS 439 - Infant Development in the Family: Typical and Atypical (3)
SOCI 482 - Sociology of Death and Dying (3)

Leadership Studies (9)

FCNS 384 - Asian American Families (3),
OR FCNS 405 - Child Health and Nutrition (3),
OR FCNS 489B - Topical Issues in Family and Child Studies: Social Policies, Children, and Families (3),
OR FCNS 489E - Topical Issues in Family and Child Studies: Working with Ethnically Diverse Children and Families (3)
FCNS 434 - Administration and Supervision of Programs for Young Children (3)
FCNS 445 - Management of Human and Family Resources (3)

Requirements outside School (15-16)

*BIOS 103 - General Biology (3),
OR *BIOS 109 - Human Biology (3)
One of the Following in consultation with adviser (3)
ENGL 250 - Practical Writing (3)
IHHS 350 - Critical Thinking for Health and Human Services Professionals (3)
*MATH 155 - Trigonometry and Elementary Functions (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
*MATH 229 - Calculus I (4)
*PHIL 105 - Critical Reasoning (3)
PSYC 305 - Research Methods (3)

* Available for general education credit.

*PSYC 102 - Introduction to Psychology (3)
*SOCI 170 - Introduction to Sociology (3)
*STAT 208 - Basic Statistics (3)

Total Hours for Emphasis 3, Child Development: 63-64

Special Requirements
Students doing an internship in a hospital must have liability insurance.

Students applying to emphasis 3 must provide documentation that they have performed 25 hours of approved community service in a child development agency, working directly with infants and/or young children (birth to 8 years).

Students must earn a grade of C or better in FCNS 230 in order to enroll in FCNS 330, FCNS 331, and FCNS 332. At the time of enrolling in FCNS 490, the following prerequisites must be completed: declaration as a major in emphasis 3; an overall GPA of at least 2.20 in all NIU course work; after admission to program and prior to admission to FCNS 490, completion of an additional 25 hours of approved community service in a child development agency; completion of FCNS 230 with a grade of C or better, FCNS 330 with a grade of C or better, and FCNS 331 with a grade of C or better or FCNS 332 with a grade of C or better; verification of a non-reactive two step tuberculin skin test and physical exam within the last 6 months; background check; 3 letters of reference; proof of liability insurance; and consent of the school. Students must complete FCNS 490 with a grade of C or better.

Students electing the study area of parent/infant specialist must have completed FCNS 331 with a grade of C or better prior to taking FCNS 490. Students electing the study area of parent/infant or child life specialist must have taken FCNS 439 or be concurrently enrolled in it when taking FCNS 490. Students not meeting the requirements for entry into the practicum or internship may, with the consent of the school, change to the emphasis in family and individual development in order to complete graduation requirements.

B.S. Completion in Emphasis 3

This completion program is limited to students with an Applied Associate Science degree in child care and child development from programs that have a formally established agreement with the School of Family, Consumer, and Nutrition Sciences. Up to 15 semester hours of proficiency credit may be applied to this area of study with the consent of the academic adviser or school chair. Students are encouraged to consult with the NIU adviser before selecting a practicum/internship site, which must be approved in order to gain proficiency credit in FCNS 490.

Major in Textiles, Apparel, and Merchandising (B.S.)

This program is designed to prepare students to enter fashion merchandising positions in the apparel and textile industry. These positions include various aspects of design, purchasing, distribution, quality control, and promotion of fashion products. The program provides students with product knowledge of textiles and apparel as well as an understanding of socioeconomic influences and business skills relevant to merchandising fashion products. Students are encouraged to consider a minor in business administration.

Requirements in School (33-37)
FCNS 152 - Fiber and Fabric Analysis I (3)
FCNS 258 - Fashion Industries (3)
FCNS 351 - Fiber and Fabric Analysis II (3)
FCNS 353 - Apparel Products Analysis (3)
FCNS 362 - Design Trends in Western Costume (3)
FCNS 466 - Economics of Apparel and Textile Industries (3)
FCNS 468 - Consumer Behavior Related to Apparel (3)
FCNS 470 - Fashion Merchandising (3)
FCNS 474 - Textiles, Apparel, and Merchandising Internship (7),
  OR FCNS 356E - Cooperative Education II: Textiles, Apparel, and Merchandising (3)
Two of the following (6)
  FCNS 252 - Apparel Production (3)
  FCNS 272 - Merchandising Promotion (3)
  FCNS 450[2] - Workshop in Family, Consumer, and Nutrition Sciences (1-4)
  FCNS 455 - Fashion Design and Illustration (3)
  FCNS 456 - Apparel Product Development (3)
  FCNS 457 - Professional Development for Apparel Merchandising (3)
  FCNS 464 - Social Psychology of Dress and Appearance (3)

Requirements outside School (34)
ACCY 288 - Fundamentals of Accounting (3)
ART 102 - 2-D Foundation (3),
  OR ARTH 282 - Introduction to the Visual Arts (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
*ECON 260[1] - Principles of Microeconomics (3)
*MATH 210[1] - Finite Mathematics (3)
MGMT 333[1] - Principles of Management (3)
MKTG 310[1] - Principles of Marketing (3)
*PSYC 102[1] - Introduction to Psychology (3)
*SOCI 170[1] - Introduction to Sociology (3)
*STAT 208 - Basic Statistics (3),
  OR UBUS 223[1] - Introduction to Business Statistics (3)
One of the following (3)
  FCNS 365X - Principles of Retailing (3),
    OR MKTG 365 - Principles of Retailing (3)
  FINA 320 - Principles of Finance (3)
  MKTG 348 - Integrated Marketing Communications (3)
  MKTG 350 - Principles of Selling (3)
  MKTG 364 - Product Planning and Development (3)
  MKTG 370 - Internet Marketing (3)
  MKTG 425 - Services Marketing (3)

Total Hours for a Major in Textiles, Apparel, and Merchandising: 67-71

Special Requirements
Students must earn a grade of C or better in FCNS 152 and FCNS 258 before they can enroll in any FCNS course requiring either FCNS 152 or FCNS 258 as a prerequisite or in any textiles, apparel, and merchandising elective or 400-level course.

Textiles, apparel, and merchandising students who plan to participate in a fashion industry internship (FCNS 474) during their senior year should consult with their advisers during the sophomore year (or upon university entrance in the case of transfer students). An FCNS GPA of 3.00 or higher is required for admission. Applications for an internship for the following spring semester or summer session are due October 1. Consent of the school is required.

Comprehensive Major in Nutrition, Dietetics, and Hospitality Administration, (B.S.)

Majors in nutrition, dietetics, and hospitality administration may prepare for positions in dietetics, in hospitality administration, in community nutrition programs, and in the food industry, as well as in other related areas.

It is highly recommended that students see their advisers to plan their sequence of courses.

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* Available for general education credit.
[1] May apply toward requirements for a minor in business administration.
[2] When topic is related to textiles, apparel, and merchandising.

Special Requirements

Students must obtain the Illinois State Sanitation Certificate and meet current Illinois Department of Public Health requirements for food handlers and certification in first aid and cardiac pulmonary resuscitation (CPR). Students must earn a grade of C or better in FCNS prerequisite courses before they can enroll in any successive FCNS course to meet the requirements for a nutrition, dietetics, and hospitality administration major.

Emphasis 1. Hospitality Administration

This emphasis provides basic preparation for fulfillment of the baccalaureate requirements for careers in hospitality management, or for graduate studies in this area. Majors in this emphasis receive practical experience in a student-operated dining facility, in on-campus residence halls where several thousand meals are served daily, and in a variety of other food service operations used as internship/independent study sites.

Majors are encouraged to consider completion of a minor in business administration.

Requirements in School (36)

FCNS 200A - Principles of Food Preparation (3)
FCNS 200B - Food Preparation Laboratory (2)
FCNS 201 - Human Nutrition (3)
FCNS 202 - Introduction to the Hospitality Industry (3)
FCNS 301 - Introduction to Food Services (3)
FCNS 302 - Lodging Operations (3)
FCNS 320 - Quantity Food Production (4)
FCNS 418 - Managing Human Resources in the Hospitality Industry (3)
FCNS 425 - Hospitality Administration (3)
FCNS 426 - Strategic Management in the Hospitality Industry (3)
FCNS 431C - Internship: Nutrition, Dietetics, and Hospitality Administration (6)

Requirements outside School (43-45)

ACCY 288[1] - Fundamentals of Accounting (3)
*BIOS 104 - General Biology (4),
OR *BIOS 109 - Human Biology (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
*ECON 260[1] - Principles of Microeconomics (3)
*MATH 210[1] - Finite Mathematics (3)
MGMT 217[1] - Legal Environment of Business (3)
MGMT 333[1] - Principles of Management (3)
MKTG 310[1] - Principles of Marketing (3)
MKTG 425 - Services Marketing (3)
*PSYC 102[1] - Introduction to Psychology (3)
*SOCI 170[1] - Introduction to Sociology (3),
OR *ANTH 120[1] - Anthropology and Human Diversity (3)
STAT 301[1] - Elementary Statistics (4),
OR *STAT 208 - Basic Statistics (3),
OR UBUS 223[1] - Introduction to Business Statistics (3)
Two of the following (6)
BIOS 213 - Introductory Bacteriology (3)
FINA 320[1] - Principles of Finance (3)
MGMT 335 - Organizational Behavior (3)
MKTG 325 - Buyer Behavior (3)
MKTG 350 - Principles of Selling (3)
OMIS 338[1] - Principles of Operations Management (3)
An upper-division course in nutrition, dietetics, and hospitality administration (3)

Total Hours for Emphasis 1, Hospitality Administration: 79-81

Emphasis 2. Nutrition and Dietetics

This emphasis provides basic preparation for fulfillment of the baccalaureate requirements for careers in community nutrition programs, dietetics, or for graduate studies in these areas.

Completion of this emphasis satisfies the academic requirements of the Didactic Program in Dietetics (DPD) of the American Dietetic Association (ADA). The program is approved by the ADA. To become a registered dietitian (R.D.), a student must complete both the academic and experience requirements of the ADA, and pass the national registry examination. Post-baccalaureate students requesting DPD verification must complete a minimum of 9 semester hours of approved course work at NIU with a grade of C or better. Consult with the DPD director prior to NIU enrollment to determine required course work.

Graduates with this emphasis may satisfy the experience requirement for registry by completing a dietetic internship. These programs are offered by various institutions across the country. NIU offers a dietetic internship in conjunction with the M.S. in nutrition and dietetics.

It is strongly recommended that students planning to apply for a practice program acquire work experience in food service and patient care.

Requirements in School (31)

FCNS 200A - Principles of Food Preparation (3)
FCNS 200B - Food Preparation Laboratory (2)
FCNS 309 - Science of Nutrition (3)
FCNS 310 - Applied Nutrition (3)
FCNS 320 - Quantity Food Production (4)
FCNS 410 - Community Nutrition (3)
FCNS 415 - Nutrition in Clinical Care I (3)
FCNS 416 - Nutrition in Clinical Care II (3)
FCNS 420 - Foodservice Management (3)
FCNS 498 - Professional Seminar in Family, Consumer, and Nutrition Sciences (1)
One of the following (3)
FCNS 301 - Introduction to Food Services (3),
OR FCNS 406 - Global Food and Nutrition Issues (3),
OR FCNS 424 - Cultural and National Food Patterns (3),
OR FCNS 429 - Strategies for Modifying Nutrition Behaviors (3)

Requirements outside School (43-44)

*BIOS 104 - General Biology (4)
BIOS 213 - Introductory Bacteriology (3)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
CHEM 230 - Introductory Organic Chemistry (3)
CHEM 370 - Introductory Biochemistry (3)
*ECON 260 - Principles of Microeconomics (3)
*EPFE 201 - Education as an Agent for Change (3),
OR EPS 300 - Educational Psychology (3)
*MATH 210 - Finite Mathematics (3)
MGMT 333 - Principles of Management (3)
*PSYC 102 - Introduction to Psychology (3)
*SOCI 170 - Introduction to Sociology (3),
OR *ANTH 120 - Anthropology and Human Diversity (3)
STAT 301 - Elementary Statistics (4),
OR *STAT 208 - Basic Statistics (3)

Total Hours for Emphasis 2, Nutrition and Dietetics: 74-75

Teacher Certification in Family and Consumer Sciences

Students with a major in the School of Family, Consumer, and Nutrition Sciences who want to be certified to teach family and consumer sciences in middle/junior high and high school must

plan their programs of study in consultation with a teacher certification adviser in the school at the earliest possible date.

* Available for general education credit.
[1] May apply toward requirements for a minor in business administration.

Early selection of appropriate general education courses will eliminate course duplication. See "Teacher Certification Requirements."

obtain consent of family and consumer sciences teacher certification adviser for enrollment in early field experiences.

obtain school approval for admission into the teacher certification program. School approval for admission to the teacher certification program requires admission to the major or a degree in family and consumer sciences from an accredited institution; passing the basic skills test in the Illinois Certification Testing System (ICTS); and a cumulative GPA of at least 2.75 in all NIU course work and 3.00 in FCNS course work. Admission to a degree program does not guarantee admission to the certification program.

obtain school approval for admission into student teaching which requires passing the family and consumer sciences content test in the Illinois Certification Testing System.

maintain a minimum 2.75 GPA in all NIU course work with a 3.00 GPA in FCNS 341 and FCNS 344 for retention.

Discipline course work must be approved by the school's teacher certification adviser.

Students with course work in family and consumer sciences completed more than ten years ago must demonstrate currency.

Requirements in School (61-62)

FCNS 152 - Fiber and Fabric Analysis I (3),
OR FCNS 258 - Fashion Industries (3)
FCNS 200A - Principles of Food Preparation (3)
FCNS 201 - Human Nutrition (3),
OR FCNS 405 - Child Health and Nutrition (3)
FCNS 230 - Child Development (3)
FCNS 240 - Teaching and Learning in Family and Consumer Sciences Education (3)
FCNS 280 - Human Development, the Family, and Society (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 344 - Curriculum Development in Family and Consumer Sciences (3)
FCNS 345 - Methods and Resources for Teaching Family and Consumer Sciences (3)
FCNS 438 - Parent Education (3)
FCNS 475 - Student Teaching in Family and Consumer Sciences (Secondary) (12)
One of the following (3)
- FCNS 180 - Personal Development and the Family (3)
- FCNS 285 - Introduction to Family Life Education (3)
- FCNS 384 - Asian American Families (3)
- FCNS 484 - Family Theories (3)
- FCNS 489B - Topical Issues in Family and Child Studies: Child Abuse and Neglect (3)
- FCNS 489D - Topical Issues in Family and Child Studies: Family and Divorce (3)

Two of the following (6)
- FCNS 330 - Principles of Guiding Young Children (3)
- FCNS 332 - Inclusive Program Planning for Children 3-8 Years of Age and Their Parents (3)
- FCNS 432 - Theories of Child Development (3)
- FCNS 434 - Administration and Supervision of Programs for Young Children (3)
- FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
- FCNS 489C - Topical Issues in Family and Child Studies: Child Abuse and Neglect (3)
- FCNS 489E - Topical Issues in Family and Child Studies: Working with Ethnically Diverse Children and Families (3)

Two of the following (6)
- FCNS 207 - The Consumer (3)
- FCNS 343 - Family Financial Planning (3)
- FCNS 445 - Management of Human and Family Resources (3)

One of the following content areas (5-6)

Apparel and Textiles (6)

FCNS 152 - Fiber and Fabric Analysis I (3),
OR FCNS 258 - Fashion Industries (3),
OR FCNS 362 - Design Trends in Western Costume (3)
FCNS 252 - Apparel Production (3),
OR FCNS 353 - Apparel Products Analysis (3)

Living Environments (6)

Courses taken with approval of program adviser.

Nutrition, Wellness, and Hospitality (5)

FCNS 200B - Food Preparation Laboratory (2)
FCNS 202 - Introduction to the Hospitality Industry (3),
OR FCNS 301 - Introduction to Food Services (3),
OR FCNS 406 - Global Food and Nutrition Issues (3)

Requirements outside School (34-37)

EPFE 400 - Foundations of Education (3)
EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
ETR 440 - Secondary Classroom Assessment (3)
ETT 229 - Computers in Education (3), or pass ETT Competency Exam
ETT 402 - Teaching and Learning with Technology (3)
*HIST 260 - American History to 1865 (3),
OR *HIST 261 - American History Since 1865 (3)
LTRE 310 - Teaching Reading in the Secondary School (3)
*MATH 201 - Foundations of Elementary School Mathematics (3),
OR *MATH 155 - Trigonometry and Elementary Functions (3),
OR *MATH 210 - Finite Mathematics (3),
OR *STAT 208 - Basic Statistics (3)
*POLS 100 - American Government and Politics (3),
OR *POLS 150 - Democracy in America (3)
TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)
Course work in science to include biology and chemistry, one of which must be a laboratory course (7)

Additional course work required for certification depends on major selected.

Interdisciplinary Major in Early Childhood Studies (B.S.)

The School of Family, Consumer, and Nutrition Sciences and the Department of Teaching and Learning offer a collaborative program leading to the B.S. degree with a major in early childhood studies. The program is designed to prepare personnel for professional roles serving children from birth through eight years of age and their families. This program includes the concepts, competencies, and skills required by teachers, child care workers, and other professionals involved in the education and care of young children.

Graduates in either of the emphases qualify for Illinois Early Childhood Teacher Certification enabling them to teach children from birth through grade three in Illinois public schools. Students in the 04 certification emphasis are prepared to teach a diverse student population in inclusive classrooms. Strong emphasis is placed on understanding the child in family and community contexts. The early childhood studies program has been approved by the Illinois State Board of Education and the National Association for the Education of Young Children.

Admission to either of the emphases in the interdisciplinary major in early childhood studies is limited. University admission does not necessarily constitute eligibility for admission into this program. Admission policies are described in the "Limited Admissions Requirements" section of this catalog.

Students must be admitted to the early childhood studies program before they can enroll in any of the professional course work. To continue to enroll, students must maintain a minimum overall GPA of 2.75.

* Available for general education credit.

Students should carefully read the section entitled "Teacher Certification Requirements."

As part of teacher certification, students will need to pass Illinois Certification Testing System (ICTS) examinations, including the basic skills test prior to program admission and the subject matter knowledge test prior to student teaching in early childhood studies, as required by the Illinois State Board of Education.

Due to the comprehensive nature of the program and required course sequence, all students must plan their program of study with an early childhood studies adviser.

The major GPA in the interdisciplinary major is calculated using course work completed in the School of Family, Consumer, and Nutrition Sciences and the Department of Teaching and Learning.

Students enrolled in the interdisciplinary major as a declared major or pre-major are not permitted to count FCNS courses toward fulfilling general education requirements or to declare a minor in the School of Family, Consumer, and Nutrition Sciences.

Emphasis in 04 Certification

Students who successfully complete the emphasis will have completed all required ISBE and NCATE standards for certification.

Core Requirements (61-65)

COMD 403/ LTLA 403X - Language Development in Children (3)
*EPFE 201 - Education as an Agent for Change (3)
ETT 229 - Computers in Education (3), or pass the ETT proficiency examination (0)
ETT 402 - Teaching and Learning with Technology (3)
FCNS 230 - Child Development (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
*HIST 260 - American History to 1865 (3),
OR *HIST 261 - American History Since 1865 (3)
LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3)
*MATH 201 - Foundations of Elementary School Mathematics (3)
PHIL 231 - Contemporary Moral Issues (3)
*PSYC 102 - Introduction to Psychology (3)
TLEC 282 - Educational Participation in Clinical Experiences: Early Childhood Education (1-2)
TLEC 382 - Practicum in Early Childhood Studies (3)
TLEC 403 - Primary Curriculum (3)
TLEC 430 - Preschool and Kindergarten Curriculum (3)
TLEC 485A - Student Teaching in Preschool-Kindergarten (6)
TLEC 485B - Student Teaching in Primary (6)
TLEE 340 - The Language Arts and Social Studies for the Primary Child (3)
TLEE 343 - Teaching Science and Mathematics to Children Ages 5-8 (3)
TLSE 240 - Introduction to Special Education (3)

Requirements in School (22)

FCNS 231 - An Observational Approach to the Study and Assessment of Young Children (3)
FCNS 330 - Principles of Guiding Young Children (3)
FCNS 331A - Practicum in Early Childhood Studies: Infants and Toddlers (1)
FCNS 405 - Child Health and Nutrition (3)
FCNS 432 - Theories of Child Development (3)
FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
FCNS 439 - Infant Development in the Family: Typical and Atypical (3)
FCNS 489E - Topical Issues in Family and Child Studies: Working with Ethnically Diverse Children and Families (3)

Requirements outside School (9-10)

BIOS 103 - General Biology (3),
OR *BIOS 104 - General Biology (4),
OR *BIOS 109 - Human Biology (3)
*POLS 100 - American Government and Politics (3),
OR *POLS 150 - Democracy in America (3)
STAT 208 - Basic Statistics (3)

Total Hours for Emphasis in 04 Certification: 92-97

Minors

Prospective minors should consult with the school's undergraduate academic adviser so the school may plan to accommodate students in required courses. These minors are not open to students majoring in a program offered by the School of Family, Consumer, and Nutrition Sciences.

General Minor (19)

*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
*FCNS 152 - Fiber and Fabric Analysis I (3)
*FCNS 201 - Human Nutrition (3),
OR FCNS 405 - Child Health and Nutrition (3)
*FCNS 207 - The Consumer (3)
*FCNS 280 - Human Development, the Family, and Society (3)
*PSYC 102 - Introduction to Psychology (3)

Minor in Family and Child Studies (18)

*FCNS 230 - Child Development (3),
OR *FCNS 280 - Human Development, the Family, and Society (3)
FCNS 284 - Introduction to Family Relationships (3)
FCNS 343 - Family Financial Planning (3)
*PSYC 102 - Introduction to Psychology (3)
Two of the following, including at least one upper-division course (6)
FCNS 207 - The Consumer (3)
FCNS 384 - Asian American Families (3)
FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
FCNS 438 - Parent Education (3)
FCNS 439 - Infant Development in the Family: Typical and Atypical (3)
FCNS 486 - Aging and the Family (3)
FCNS 489B - Topical Issues in Family and Child Studies: Social Policy, Children, and Families (3)
FCNS 489C - Topical Issues in Family and Child Studies: Child Abuse and Neglect (3)
FCNS 489D - Topical Issues in Family and Child Studies: The Family and Divorce (3)

Minor in Nutrition, Dietetics, and Hospitality Administration (18)

FCNS 200A - Principles of Food Preparation (3)
FCNS 200B - Food Preparation Laboratory (2)
*FCNS 201 - Human Nutrition (3),
OR FCNS 306 - Nutrition in Relation to Health and Exercise (2), and KNPE 306 - Sports Nutrition (1),
OR FCNS 306 - Nutrition in Relation to Health and Exercise (3),
OR FCNS 309 - Science of Nutrition (3),
OR FCNS 405 - Child Health and Nutrition (3)
*CHEM 110 - Chemistry (3), and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 General Chemistry Laboratory I (1)

* Available for general education credit.

Two courses in nutrition, dietetics, and hospitality administration, one of which must be upper division, chosen after consultation with adviser (6)

Minor in Textiles, Apparel, and Merchandising (19)

ART 102 - 2-D Foundation (3),
OR *ARTH 282 - Introduction to the Visual Arts (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
FCNS 152 - Fiber and Fabric Analysis I (3)
FCNS 258 - Fashion Industries (3)
FCNS 353 - Apparel Products Analysis (3)
One course in textiles, apparel, and merchandising after consulting with an adviser (3)

Course List

General

198. ORIENTATION IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1). Introduction, philosophy, and history of the field, choosing a major area of study, purpose of core and general education courses, contribution of volunteer work and campus experiences to employability. Exploration of career choices.

256. COOPERATIVE EDUCATION I (1 to 3).
A. Child Development
B. Family Services
C. Nutrition, Dietetics, and Hospitality Administration
D. Family and Consumer Sciences Education
E. Textiles, Apparel, and Merchandising
Cooperative work experience for students in family, consumer, and nutrition sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. S/U grading. PRQ: Declared or pre-major and consent of school.

356. COOPERATIVE EDUCATION II (1 to 3).
A. Child Development
B. Family Services
C. Nutrition, Dietetics, and Hospitality Administration
D. Family and Consumer Sciences Education
E. Textiles, Apparel, and Merchandising
Advanced cooperative work experience for students in family, consumer, and nutrition sciences. Participation and work site must be approved by the school and the cooperative education program coordinator. Enrollment is restricted to students participating in a second course experience or equivalent. S/U grading. May be repeated to a maximum of 6 semester hours. PRQ: FCNS 256 or equivalent, declared major, and consent of school.

431. INTERNSHIP (1 to 15).
A. Child Development. PRQ: See Special Requirements, Emphasis 3, Child Development.
B. Family Services. PRQ: See Special Requirements, Emphasis 2, Family Social Services.
C. Nutrition, Dietetics, and Hospitality Administration. PRQ: Consent of department.
D. Family and Consumer Sciences Education. PRQ: Consent of department.
Supervised participation in professional settings. Students will be assigned to experiences appropriate to their professional interest. May be repeated to a maximum of 15 semester hours. When taken in conjunction with FCNS 356, Cooperative Education II, total enrolled credit hours in both courses may not exceed 15 hours. S/U grading basis may be used. May be repeated to a maximum of 15 semester hours. PRQ: Consent of school.

450. WORKSHOP IN FAMILY, CONSUMER, AND NUTRITION SCIENCES(1 to 4). Advanced studies of various areas in family, consumer, and nutrition sciences. Nature and length of workshop dependent upon needs of students. May be repeated for a maximum of 6 semester hours. PRQ: At least junior standing.

460. PROBLEMS IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1 to 3). Work in individual problems in the student's special area. May be repeated to a maximum of 6 semester hours. PRQ: Junior or senior standing and consent of school.

498. PROFESSIONAL SEMINAR IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1). Professional career development, opportunities for employment, organization affiliations, and legislation as it affects the programs in family, consumer, and nutrition sciences. PRQ: At least junior standing in School of Family, Consumer, and Nutrition Sciences.

Nutrition, Dietetics, and Hospitality Administartion

200A. PRINCIPLES OF FOOD PREPARATION (3). Principles of food preparation as related to the chemical, physical, and organoleptic properties of food. PRQ: CHEM 110 and CHEM 111.

200B. FOOD PREPARATION LABORATORY(2). Designed to accompany FCNS 200A. Two 3-hour periods a week. PRQ or CRQ: FCNS 200A.

201. HUMAN NUTRITION (3). Role of nutrition in human biological systems: properties of nutrients; interaction with other environmental and genetic factors; quality of the current food supply. Not open for credit to students having previous credit in FCNS 306 or FCNS 309. PRQ: One year of high school chemistry and BIOS 103, BIOS 104, or BIOS 109, or equivalent.

202. INTRODUCTION TO THE HOSPITALITY INDUSTRY (3). Exploration of related fields and career opportunities in the hospitality industry, travel and tourism, lodging, foodservice, meetings and conventions, leisure and recreation, and beverage operations. Description of specific positions including requirements of job duties, skills, knowledge, personality attributes, and working conditions. Overview of current regional, national, and global trends in the industry.

301. INTRODUCTION TO FOOD SERVICES (3). Overview of equipment, preparation techniques and terminology, menu planning, and costing in quantity food services. Includes lecture and hands-on laboratory experiences in both a student-operated dining facility and in the Residence Halls Food Services. PRQ: FCNS 200A with a grade of C or better, FCNS 200B with a grade of C or better, State Sanitation Certificate, and current Illinois Department of Public Health requirements for food handlers.

302. LODGING OPERATIONS (3). Study of operational issues of lodging facilities including housekeeping, reservations, and front desk. Focus on revenue management, forecasting, and property management systems. On-site observations with practical applications. PRQ: FCNS 202 with a grade of C or better.

306. NUTRITION IN RELATION TO HEALTH AND EXERCISE(2 to 3). Essentials of normal nutrition with some application to exercise. Not open for credit to students having previous credit in FCNS 309. PRQ: BIOS 311 or BIOS 357 and one course in chemistry. If taken for 2 semester hours, CRQ: KNPE 306.

309. SCIENCE OF NUTRITION (3). Study of various nutrients; their chemistry, properties, classification, digestion, absorption, transport, metabolism, functions, dietary allowances, food sources, and deficiency symptoms. Introduction of the exchange system for dietary planning. PRQ: CHEM 230 and BIOS 104. Offered fall semester only.

310. APPLIED NUTRITION (3). Application of the principles of nutrition in managing the nutritional needs of individuals throughout the life cycle. Evaluation of current nutritional practices and nutritional status. PRQ: FCNS 309 with a grade of C or better. Offered spring semester only.

320. QUANTITY FOOD PRODUCTION (4). Application of principles of food preparation to quantity food production and service, including operation and care of equipment, procurement of goods, scheduling of employees, costing of menus, and management responsibilities for a day of service in a student-operated dining facility. PRQ: FCNS 200A and FCNS 200B, current State of Illinois Sanitation Certificate, and certifications in first aid and cardiac pulmonary resuscitation (CPR).

321. COMPUTER APPLICATIONS IN FOODSERVICE MANAGEMENT (3). Exploration of the use of data processing systems in food production and services. PRQ: Admission to the major in nutrition, dietetics, and hospitality administration.

405. CHILD HEALTH AND NUTRITION (3). Application of the principles of health and nutrition to meet the physiological, sociological,

* Available for general education credit.

and psychological needs of individuals from the prenatal period through adolescence. Consideration of the interaction of physiological factors with the influence of family, school, and community on the health and nutrition of children. Not available for credit to majors in nutrition, dietetics, and hospitality administration.

406. GLOBAL FOOD AND NUTRITION ISSUES (3). Interdisciplinary study of issues related to hunger and malnutrition in the world setting; causes of food crises in less developed nations, as well as in technologically advanced countries. PRQ: BIOS 103, BIOS 104, or BIOS 109 and ANTH 120 or SOCI 170 or equivalent.

408. CURRENT PROBLEMS AND TRENDS IN NUTRITION AND FOODS (3). Readings in and discussion of selected classic studies and recent developments in the field of nutrition and foods. Implications for dietitians, nutritionists, teachers, extension workers, and others. PRQ: Consent of school.

410. COMMUNITY NUTRITION (3). Nutrition problems and practices in the community, with emphasis on underserved populations. Planning, implementing, and evaluating community nutrition programs. Includes field experiences and hands-on learning. PRQ: FCNS 310 with a grade of C or better.

415. NUTRITION IN CLINICAL CARE I (3). Introduction to therapeutic nutrition. An understanding of the metabolic and pathologic changes during chronic disease condition and adaptation of the principles of normal nutrition to promote optimum nutrition during disease states. PRQ: FCNS 310 with a grade of C or better, BIOS 357, and CHEM 370. Offered fall semester only.

416. NUTRITION IN CLINICAL CARE II (3). Discussion of current research of the role of nutrition during clinical care with emphasis on acute conditions requiring special nutrition support and alternate nutrient delivery routes. PRQ: FCNS 415 with a grade of C or better. Offered spring semester only.

418. MANAGING HUMAN RESOURCES IN THE HOSPITALITY INDUSTRY (3). Fundamental concepts, techniques, and tools of human resources management in the hospitality industry. Employee selection, performance appraisals, training, compensation, and benefits. Global issues and other current topics. PRQ: FCNS 202.

420. FOODSERVICE MANAGEMENT (3). Principles of foodservice management with emphasis on personnel management, cost controls, marketing, and menu analysis. PRQ: MGMT 333. CRQ: FCNS 320.

424. CULTURAL AND NATIONAL FOOD PATTERNS (3). Food practices as influenced by social, cultural, and economic factors. PRQ: Junior or senior standing, or consent of school.

425. HOSPITALITY ADMINISTRATION (3). Application of cost control principles to hospitality industry with focus on financial statement analysis, management of assets, ratio analysis, operating budgeting, and cash management. PRQ: ACCY 288, MGMT 217, MKTG 310, and FCNS 420 with a grade of C or better.

426. STRATEGIC MANAGEMENT IN THE HOSPITALITY INDUSTRY (3). Analysis of environments associated with a product/market domain and implementation of the proper mix of competitive strategy and organization structure in the hospitality industry. Opportunity to explore the process and content of strategic management as applied to the administration of hospitality organizations. PRQ: FCNS 420 and MGMT 333.

428. EXPERIMENTAL FOODS (3). Application of scientific method in the study and design of experimental food problems. Development of evaluative and laboratory research techniques through group and individual projects. PRQ: FCNS 200A with a grade of C or better, FCNS 200B with a grade of C or better, and CHEM 370.

429. STRATEGIES FOR MODIFYING NUTRITION BEHAVIORS (3). Exploration of various strategies for assisting individuals and families to make changes in their behaviors related to food and nutrition. Attention given to nutrition counseling and nutrition education. Active participation in applying strategies to case studies and hypothetical situations. PRQ: FCNS 309 with a grade of C or better and FCNS 310 with a grade of C or better, or consent of school.

Family Economics and Management

207. THE CONSUMER (3). Role of family members as consumers; influence of values and goals upon consumption practices; information and protection for the consumer.

343. FAMILY FINANCIAL PLANNING (3). Principles of management as related to family finances.

407. CONSUMER PROTECTION (3). Current trends in consumption; consumer movement in the United States; laws and agencies protecting and serving the consumer; product analysis using appropriate materials and skills. PRQ: Senior standing.

445. MANAGEMENT OF HUMAN AND FAMILY RESOURCES (3). Integration of theory and research for practice related to management of resources by individuals and families. Exploration of multicultural perspectives on resource management. PRQ: FCNS 180 or FCNS 280, and at least junior standing.

Family and Consumer Sciences Education

240. TEACHING AND LEARNING IN FAMILY AND CONSUMER SCIENCES EDUCATION (3). Introduction to family and consumer sciences education and the role of the teacher in planning and implementing instruction for middle/junior high school and high school level students. Twenty clock hours of early field experience. PRQ: Minimum 2.75 GPA and consent of school.

344. CURRICULUM DEVELOPMENT IN FAMILY AND CONSUMER SCIENCES (3). Planning critical science-based curriculum for family and consumer sciences programs in middle/junior high school and high school settings to meet individual, community, and societal needs. Fifty clock hours of early field experience. PRQ: FCNS 240, at least 18 semester hours of FCNS course work, and admission to the school's teacher certification program.

345. METHODS AND RESOURCES FOR TEACHING FAMILY AND CONSUMER SCIENCES (3). Selection, development, and use of teaching methods and materials in family and consumer sciences programs in middle/junior high school and high school settings. Fifty clock hours of early field experience. PRQ: FCNS 344.

475. STUDENT TEACHING IN FAMILY AND CONSUMER SCIENCES (SECONDARY)(12). Student teaching for a period of time agreed upon by student and adviser but for a total of no less than one semester. Includes required attendance at on-campus seminars. Applications are made through a family and consumer sciences teacher certification adviser. See "Teacher Certification Requirements." PRQ: FCNS 344 and FCNS 345, minimum 3.00 GPA in FCNS 344 and FCNS 345, and consent of school.

Textiles Apparel, and Merchandising

152. FIBER AND FABRIC ANALYSIS I (3). Study of basic textile fibers, yarns, fabric construction and finishes; their origin, processing, and properties. Emphasis on textile terminology, selection, and care. PRQ or CRQ: CHEM 110 and CHEM 111.

252. APPAREL PRODUCTION (3). Fundamentals of mechanics of apparel production including raw material analysis, cutting production analysis, and assembly and finishing processes. PRQ: FCNS 152 with a grade of C or better and FCNS 258 with a grade of C or better.

258. FASHION INDUSTRIES (3). Survey of the workings and interrelationships of the various industries and services that comprise the fashion business. Career opportunities in the fashion field.

272. MERCHANDISING PROMOTION (3). Study of merchandising promotion as it relates to the apparel and fashion industry, with emphasis on coordination of forecasting, display, and promotional events. PRQ: ART 102 or ARTH 282, or consent of school.

351. FIBER AND FABRIC ANALYSIS II (3). Emphasis on fiber properties resulting from chemical and physical structures of the fibers; experience in executing and reporting fiber performance evaluations. PRQ: CHEM 110, CHEM 111, FCNS 152 with a grade of C or better, and FCNS 258 with a grade of C or better.

353. APPAREL PRODUCTS ANALYSIS (3). Analysis of the principles and elements of creative and technical design for the ready-to-wear market. PRQ: FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, and ART 102 or ARTH 282, or consent of school.

354. TAILORING (3). Professional methods and techniques for making suits and coats. PRQ: FCNS 252 or consent of school.

362. DESIGN TRENDS IN WESTERN COSTUME (3). Survey of western costumes and textiles of past periods and their relationship to contemporary fashion.

365X. PRINCIPLES OF RETAILING (3). *Crosslisted as MKTG 365.* Study of retail institutions; store organization, location strategy, merchandising, inventory control, customer communication, price determination, and the management of retail salespersons. PRQ: MKTG 310 or UBUS 310.

367. COMPUTER APPLICATIONS FOR TEXTILES, APPAREL, AND MERCHANDISING (3). Exploration of computers and software applications used in textiles, apparel, and merchandising. Emphasis on how computer technology impacts the fashion merchandising industry. PRQ: FCNS 353.

452. APPAREL DESIGN I (3). Apparel design through the fundamental principles and processes of flat pattern methods. Emphasis on the development of a master pattern and original design. May be repeated once for advanced projects. PRQ: FCNS 152 with a grade of C or better, FCNS 252, and FCNS 258 with a grade of C or better, or consent of school.

453. EXPERIMENTAL TEXTILES (3). Standard textile testing methods used in determining the physical and chemical characteristics of fibers, yarns, and fabrics, and the statistical methods employed in data analysis and evaluation. PRQ: CHEM 110, CHEM 111, FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, and FCNS 351.

454. APPAREL DESIGN II (3). Draping based upon the interrelating factors of form, design, and material. Emphasis on experimentation with materials, techniques, and original design ideas. May be repeated once for advanced projects. PRQ: FCNS 152 with a grade of C or better, FCNS 252, and FCNS 258 with a grade of C or better, or consent of school.

455. FASHION DESIGN AND ILLUSTRATION (3). Study of design elements as applied to textiles, apparel, and accessories. Examination and application of methods used to design, illustrate, and communicate fashion. PRQ: ART 102 or ARTH 282, FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, FCNS 353, and FCNS 362, or consent of school.

456. APPAREL PRODUCT DEVELOPMENT (3). Fundamentals of apparel manufacturing including management decisions involved in the design, production, merchandising, and marketing of apparel products. Factors affecting the cost, price, quality, performance, and value of garments from the perspectives of apparel manufacturers and marketers. PRQ: FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, and FCNS 353 or consent of school.

457. PROFESSIONAL DEVELOPMENT FOR APPAREL MERCHANDISING (3). Exploration of career opportunities specific to the apparel merchandising industry. Job search strategies and skills for students majoring in textiles, apparel, and merchandising. Self-assessment as a step toward successful career planning. Ethical issues pertaining to the apparel merchandising industry. Students are encouraged to enroll in this class prior to completing their internship experience. PRQ: At least junior standing and must have completed 15 semester hours in the major including FCNS 152 with a grade of C or better and FCNS 258 with a grade of C or better.

464. SOCIAL PSYCHOLOGY OF DRESS AND APPEARANCE (3). Analysis of socio-cultural influences on fashion change. Dress as nonverbal communication, the appearance perception process, and the role of dress in social interaction. Body image and satisfaction, gender issues and dress, dress and appearance issues across the life cycle. PRQ: FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, FCNS 362, PSYC 102, SOCI 170, or consent of school.

466. ECONOMICS OF APPAREL AND TEXTILE INDUSTRIES (3). Factors affecting the production, distribution, and consumption of apparel and textile products; the role of the apparel and textile industries in the national economy. PRQ: ECON 260, FCNS 152 with a grade of C or better, and FCNS 258 with a grade of C or better.

468. CONSUMER BEHAVIOR RELATED TO APPAREL (3). Analysis of acquisition and consumption of apparel from perspectives of motivation, perception, learning, and attitude formation. Effects of factors constituting life style of families in various socioeconomic, ethnic, and age groups. Not open for credit to students with previous credit in MKTG 325. PRQ: FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, PSYC 102, SOCI 170, STAT 208, and at least junior standing.

470. FASHION MERCHANDISING (3). Functions and practices of retail fashion store management and organization. Observation of the operation of stores. PRQ: FCNS 152 with a grade of C or better, FCNS 258 with a grade of C or better, MATH 210, and MKTG 310.

474. TEXTILES, APPAREL, AND MERCHANDISING INTERNSHIP (7). Off-campus supervised and coordinated training-work program in a cooperating industry/retailing establishment. Applications for an internship for the following spring semester or summer session are due October 1. Students should consult with an adviser during their sophomore year (or upon entrance to the university in the case of transfer students). PRQ: FCNS GPA of 3.00 or above, a minimum of 9 semester hours in major, at least a junior standing, and consent of school.

Family and Child Studies

180. PERSONAL DEVELOPMENT AND THE FAMILY (3). Self concept in relation to family. Influence upon personality development and the maturing person. Development of intimate relationships.

230. CHILD DEVELOPMENT (3). Understanding of developmental principles of children under 8 years of age. Includes observation. CRQ: PSYC 102.

231. AN OBSERVATIONAL APPROACH TO THE STUDY AND ASSESSMENT OF YOUNG CHILDREN (3). Observational techniques and other assessment methods used in the study of young children (0-8 years) in inclusive natural and experimental settings. Emphasis on diverse learners and learning environments. CRQ: FCNS 230.

280. HUMAN DEVELOPMENT, THE FAMILY, AND SOCIETY (3). Survey of human growth and development from conception to death with emphasis on interaction and socialization processes. CRQ: PSYC 102.

284. INTRODUCTION TO FAMILY RELATIONSHIPS (3). Family development and internal family social processes using systemic perspectives. Family strengths and diversity. Interaction and communication patterns. PRQ: PSYC 102 or SOCI 170.

285. INTRODUCTION TO FAMILY LIFE EDUCATION (3). Introduction to and history of the profession and practice of family life education, including needs assessment, evaluation of programs, understanding group process, and contexts of family life education. PRQ: FCNS 284.

330. PRINCIPLES OF GUIDING YOUNG CHILDREN (3). Based on a knowledge of normal developmental sequence of young children, the course is designed to help the student identify, analyze, synthesize, and evaluate the purposes and techniques of working with young children. Behavior and guidance principles are studied through observation in the child development laboratory and through other media. Cannot be taken concurrently with FCNS 331. PRQ: FCNS 230 with a grade of C or better.

331. INCLUSIVE PROGRAM PLANNING FOR INFANTS, TODDLERS, AND THEIR PARENTS (3). Principles underlying the development of planned inclusive programs for young children (conception through 2 years) and their parents. Emphasis on the selection, presentation, and use of materials and experiences consistent with current theory and research in human development. PRQ: FCNS 230 with a grade of C or better.

331A. PRACTICUM IN EARLY CHILDHOOD STUDIES: INFANTS AND TODDLERS (1). Participation and observation in infant-toddler settings for a minimum of 30 clock hours. S/U grading. PRQ: At least junior standing and completion of FCNS 230 with a grade of C or better.

332. INCLUSIVE PROGRAM PLANNING FOR CHILDREN 3-8 YEARS OF AGE AND THEIR PARENTS (3). Principles underlying the development of planned inclusive programs outside traditional school settings for children ages 3-8 years and their parents. Emphasis on selection, presentation, and use of materials and experiences consistent with current theory and research in human development. PRQ: FCNS 230 with a grade of C or better.

382. GROUP PROCESS AND PERSONAL AND FAMILY FUNCTIONING (3). Employment of group interaction in studying the ways personality limits and/or enhances personal and family functioning. PRQ: FCNS 180 with a grade of C or better, admission to the family social services emphasis, at least junior standing, and consent of school.

383. CLINICAL APPLICATIONS IN FAMILY SOCIAL SERVICES (3). Introduction to theory and techniques of family intervention with exposure to interviewing. PRQ: FCNS 180 with a grade of C or better and FCNS 382 with a grade of C or better; admission to the family social services emphasis; at least junior standing and consent of school, and 50 hours of approved community service in social service agencies.

384. ASIAN AMERICAN FAMILIES (3). Analysis of Asian American families using theories, methods, and research findings. Emphasis on the process of immigration, family formation in the United States, family dynamics, family obligations and intergenerational relationship, interracial families, changing gender roles, marriage, identity formation, family and the life cycle, and family strengths. PRQ: FCNS 284 or SOCI 170.

432. THEORIES OF CHILD DEVELOPMENT (3). Analysis of the major theories of child development and their implications in working with young children. PRQ: FCNS 230, FCNS 280, and at least junior standing.

434. ADMINISTRATION AND SUPERVISION OF PROGRAMS FOR YOUNG CHILDREN (3). Planning the total inclusive program: the administration and supervision of various types of inclusive group care for children under six. Work with inservice training, volunteers, personnel, and financial problems. PRQ: FCNS 230, and FCNS 280 or PSYC 225.

437. PARENT-CHILD INTERACTION FROM BIRTH TO 8 YEARS (3). Parent-child interactions in the home and in institutions (e.g., early childhood care and educational settings in public and private schools, community service agencies, hospitals, and parent-child centers). Survey of theory, research, and professional early childhood practice regarding parent-child interaction, and parent education and involvement. PRQ: FCNS 284, and FCNS 230 or FCNS 280 or PSYC 225.

438. PARENT EDUCATION (3). Basic principles in organization, formulation, and presentation of parent study programs. Experiences in ways of working with parents of children from preschool through adolescence. Uses of group dynamics and mass media. PRQ: FCNS 284, at least junior standing, and FCNS 230 or PSYC 424 or EPS 307.

439. INFANT DEVELOPMENT IN THE FAMILY: TYPICAL AND ATYPICAL (3). The typical and atypical development of infants in the context of the family. Study of major scientific findings concerning typical and atypical prenatal and postnatal development of the child from conception through the first two years of life. PRQ: FCNS 230 and FCNS 284.

481. PROFESSIONAL PRACTICES IN FAMILY SOCIAL SERVICES (3). Introduction to typical community family social service agencies. Includes internal function and structures and networking with other agencies, the role of the intern and entry-level worker, selected legislative statutes which relate to clients, and ethical behavior of employees and interns. PRQ: FCNS 230 or FCNS 280 or PSYC 225. CRQ: FCNS 284.

484. FAMILY THEORIES (3). Micro and macro theoretical approaches to family relationships; integration and application of theories and research to family processes and the practice of family science and family life education. PRQ: FCNS 230 or FCNS 280 and FCNS 284, and at least junior standing.

486. AGING AND THE FAMILY (3). Family roles of the middle aged and elderly, including care giving and receiving; cultural variation; workforce and leisure participation; financial status; health status; housing needs; and the role of public and private agencies and institutions in the provision of services for the elderly. PRQ: PSYC 102 or SOCI 170, and FCNS 280, FCNS 284 or PSYC 225, or consent of school.

489. TOPICAL ISSUES IN FAMILY AND CHILD STUDIES (3)
B. Social Policy, Children, and Families
C. Child Abuse and Neglect
D. The Family and Divorce
E. Working With Ethnically Diverse Children and Families
Selected topics affecting child development and family life. May be repeated to a maximum of 15 semester hours when topic changes. No more than 9 semester hours can be applied toward the emphasis in family and individual development and the emphasis in child development, and no more than 6 semester hours can be applied toward the emphasis in family social services. PRQ: At least two of FCNS 180, FCNS 230 or FCNS 280/PSYC 225, and FCNS 284.

490. PRACTICUM IN INFANT AND CHILD DEVELOPMENT LABORATORIES (6 to 12). Supervised on-campus practicum in child development. Opportunities for planning and supervising inclusive programs for infants and children of diverse backgrounds and abilities, up to 7 years of age. No more than 15 semester hours from field experiences in FCNS 356 and FCNS 490 may be applied toward graduation. Undergraduate students must take this course for 12 semester hours. PRQ: See emphasis 3, child development, special requirements.

Family, Consumer, and Nutrition Sciences Faculty

Laura S. Smart, Ph.D., University of Connecticut, professor, chair
Brent J. Atkinson, Ph.D., Texas Tech University, associate professor
Susan P. Bowers, Ph.D., Ohio State University, associate professor
Sarah L. Cosbey, Ph.D., Iowa State University, associate professor
Linda E. Derscheid, Ph.D., University of Iowa, associate professor
Shi Ruei Sherry Fang, Ph.D., Michigan State University, associate professor
Beverly Henry, Ph.D., Loyola University, assistant professor
Julie Hillery, Ph.D., University of Wisconsin, associate professor
Hyun-Mee Joung, Ph.D., Iowa State University, assistant professor
Lan Li, Ph.D., Virginia Polytechnic Institute and State University, associate professor
Judith Lukaszuk, Ph.D., University of Pittsburgh, assistant professor
Michael J. Martin, Ph.D., University of Georgia, professor
J. Elizabeth Miller, Ph.D., University of Georgia, associate professor
Bette Montgomery, Ph.D., University of Wisconsin, associate professor
Jane Rose Njue, Ph.D., Iowa State University, assistant professor
Amy Ozier, Ph.D., University of Alabama, assistant professor
Aimee D. Prawitz, Ph.D., Louisiana State University, associate professor
Mary E. Pritchard, Ph.D., Purdue University, professor
Andrew Reilly, Ph.D., Ohio State University, assistant professor
Lin Shi, Ph.D., Texas Tech University, assistant professor
Josephine Umoren, Ph.D., University of Nebraska, associate professor
Charline Xie, Ph.D., University of Nebraska at Lincoln, associate professor

Department of Military Science (MILS)

Army ROTC at NIU is specifically designed to give college students training and experience in the art of organizing, motivating, and leading others, while completing their studies for a baccalaureate degree in an academic discipline of their own choice. Completion of the program leads to a commission in the U.S. Army. The Reserve Officer Training Corps (ROTC) is open to all eligible full-time students, both male and female. A total of 28 semester hours of academic credit is available and is applicable to graduation requirements as elective credit. The curriculum is centered on an applied leadership training program which is designed to develop personal traits and qualities essential to successful leadership in civilian life as well as the military environment. Students who enroll in the first two years (basic course) of Army ROTC have no military service obligation. Those who complete the advanced program and are commissioned serve in the active Army, Army National Guard, or U.S. Army Reserves.

Army ROTC Programs

Basic Course. The basic course, normally completed during the freshman and sophomore years, provides the student with a general knowledge of the military's role in society and the missions of the Army. Subjects include leadership, land navigation, marksmanship, military history, and basic military skills. Students enroll in one military science course each semester. Additionally, a weekend field training exercise is required each semester. It is possible for a sophomore to complete the basic course in one year through prior arrangement with the department. The basic course consists of the first two years of Army ROTC classes including MILS 101, MILS 102, MILS 201, and MILS 202. Non-scholarship students who participate in or complete the basic program have no military service obligation.

Advanced Course. The advanced course is the professional phase of the ROTC program. Upon satisfactory completion of the required ROTC courses and the professional military education (PME) component, the student is eligible for a commission as a Second Lieutenant in the active Army, the Army National Guard, or the U.S. Army Reserve. The professional phase includes courses in leadership skills, training, personnel management, ethics, military justice, and military tactics. During the two years of the advanced course, students enroll in one military science course per semester. Additionally, a weekend field training exercise is required each semester. The advanced course consists of the final two years of Army ROTC classes including MILS 301, MILS 302, MILS 401, MILS 402, HIST 379, and attendance at the Leadership Development and Assessment Course (Advanced Internship in Military Science, MILS 350).

Placement into the advanced course requires credit for the basic course, but this requirement can be satisfied several different ways. Completion of the basic course classes (MILS 101, MILS 102, MILS 201, and MILS 202), or completion of the Basic Internship in Military Science (MILS 325), or completion of an armed services basic training course, or credit for JROTC satisfies the requirement for up to two years of basic course credit. Additionally, a student must have a minimum of 60 semester hours.

Leadership Laboratory. Leadership laboratories are taught in conjunction with military science classes. Each laboratory is two hours long; the first hour and a half consists of basic military skills training and the last 30 minutes is the orders process. The primary objective of leadership labs is to serve as a vehicle for leadership development. During leadership labs, MSIV and MSIII cadets perform respective supervisory roles as officers and non-commissioned officers (NCOs), while MS I and II cadets perform hands-on tasks that complement classroom instruction.

Pay

Stipend. Cadets who have contracted (agreed to receive a commission in active Army, Army National Guard, or U.S. Army Reserves), or have received a federal scholarship will receive a monthly tax-free stipend for up to 10 months a school year. Contact department for current stipend amounts.

Cadets will receive pay for attending the Basic Internship in Military Science (MILS 325) at Fort Knox, Kentucky, and the Advanced Internship in Military Science (MILS 350) at Fort Lewis, Washington.

Veterans are permitted to receive G.I. Bill benefits and state benefits as well as the monthly subsistence allowance while enrolled in the advanced course.

Scholarships

Four-, three-, and two-year Army ROTC scholarships are available and awarded on a competitive basis. These scholarships will pay graduate and undergraduate student tuition, fees listed in the course catalog, and provide an allowance each semester for textbooks, supplies, and equipment. Scholarship students must meet university admission criteria, pass the Army Physical Fitness Test (APFT), and pass a Department of Defense (DOD) medical exam. All federal scholarship students will incur a military service obligation. Students desiring to apply for a scholarship should contact the department chair. Any student selected for a federal scholarship may request assignment with the U.S. Army Reserves, National Guard, or Active Duty after commissioning. Typically, federal scholarship students receive Active Duty assignments.

Guaranteed Reserve Forces Duty (GRFD) scholarships are available for two- or three-year terms for a student or active reservist. A GRFD scholarship allows a student to request assignment with the U.S. Army Reserves or National Guard after commissioning. With rare exception can a student with a GRFD scholarship request Active Duty. The advantage to this scholarship is that the student will serve in a drilling reservist status in a location and unit of their choosing. Cadets commissioned into the Reserves can maintain a civilian profession and military profession. These scholarships will pay graduate and undergraduate student tuition, as well as required fees, and provide an allowance per semester for textbooks, supplies, and equipment. Students who are awarded this scholarship are required to serve in the Simultaneous Membership Program (SMP), and incur an eight-year service obligation in the Army National Guard or Army Reserves.

Simultaneous Membership Program (SMP)

Any non-federal scholarship advanced course cadet may participate in the SMP by enlisting in an Army National Guard or U.S. Army Reserve. The purpose of the SMP is to provide

off-campus officer training experience and familiarize advanced course cadets with opportunities for commissioned service in Reserve Component units. Soldiers participating in the SMP will attend drill one weekend per month and two weeks per year (typically in the summer) with a respective reserve unit as a cadet, and are entitled to pay in the grade of sergeant (E-5) for drill attendance.

Illinois Tuition And Housing Waivers

Army ROTC offers 40 tuition waivers and 20 housing waivers each semester. These waivers are available on a competitive basis to students without incurring a military obligation. The tuition waiver is offered by the State of Illinois and exempts the holder from payment of full tuition and limited fees. Similarly, the housing waiver exempts the holder from payment of room costs based on standard double room occupancy rates. To be eligible for the waiver, a student must be: a resident of the State of Illinois, a full-time student, at least 17 and not more than 29 years old at time of graduation, and have a 2.5 GPA (male applicants must be registered for the selective service). The waiver applications are available at the department office in the Chick Evans Field House. Returning enrolled cadets must have their applications submitted by the last day of academic classes of the semester prior to the semester for which the waiver is applied for, and for new cadets the applications are due by the add/drop date of the semester applied for as published in the university catalog.

Eligibility

To enroll in the military science basic program leading to an officer's commission the student must be

a citizen of the United States or lawfully admitted to the U.S. for permanent residence under applicable provisions of the Immigration and Naturalization Act, and at least 17 years of age. Parental consent is necessary if a student is under 17.

a full-time enrolled student at NIU.

able to complete the ROTC program and receive a baccalaureate degree prior to reaching 30 years of age. The age requirements may be waived in some cases, especially for those with prior military service and those majoring in nursing.

physically and mentally qualified and of good moral character.

Interested personnel should contact the department chair for more information concerning the eligibility requirements, as waiver requests will be accepted on a case-by-case basis.

Students who do not meet the above criteria, and cannot receive a waiver, may enroll in military science classes for academic credit but will not be eligible for appointment as commissioned officers. Entering freshmen should register for MILS 101 at the same time they register for other classes. Sophomores with no previous ROTC experience may register for both the freshman and sophomore courses and become eligible to enter the advanced course at the beginning of the junior year. Juniors and seniors who wish to register for the basic program are requested to confer with the chair of the Department of Military Science prior to enrollment.

Minor in Military Science (28)

The department offers a structured curriculum incorporating the U.S. Army's Basic Officer Leadership Course (BOLC) I program and academic studies that meet the U.S. Army's precommissioning requirements. Students pursue academic majors in colleges of their choice. Award of the minor will be linked to successful completion of core requirements and two approved elective courses.

This academic minor is open to all students, both those seeking a commission in the U.S. Army and those desiring to expand their knowledge of military science. The minor is not a requirement to obtain a commission.

MILS 101 - Leadership and Personal Development (2), MILS 102 - Foundations in Leadership (2), MILS 201 - Innovative Tactical Leadership (2), and MILS 202 - Leadership in Changing Environments (2),
OR MILS 325 - Basic Internship in Military Science (8) (may substitute for MILS 101, MILS 102, MILS 201, and MILS 202).
MILS 301 - Adaptive Team Leadership (3)
MILS 302 - Leadership Under Fire (3)
MILS 401 - Developing Adaptive Leaders (4)
MILS 402 - Leadership in a Complex World (4)
Course work from the following (6)
MILS 350[1] - Advanced Internship in Military Science (3),
OR MILS 495 - Independent Study (3)
Military history
HIST 321 - Revolutionary Movements Since 1789 (3)
HIST 325 - War in the Modern World (3)
HIST 379 - American Military History (3)[2]
HIST 425 - World War II (3)
HIST 476 - American Foreign Relations to 1914 (3)
HIST 477 - American Foreign Relations Since 1914 (3)
POLS 382 - U.S. Foreign Policy Making (3)
POLS 388 - U.S. National Security Policy (3)
SOCI 363 - Sociology of the Military (3)
Management/National security studies
ACCY 288 - Fundamentals of Accounting (3)
MGMT 335 - Organizational Behavior (3)
MGMT 355 - Human Resource Management (3)
OMIS 327 - Operations Analysis (3)
OMIS 351 - Information Systems in Organizations (3)
POLS 285 - Introduction to International Relations (3)
POLS 380 - American Foreign Policy (3)
POLS 483 - Russian Foreign Policy (3)
TECH 402 - Industrial Training and Evaluation (3)
TECH 404 - Supervision in Industry (3)
TECH 405 - Technology, a Human Endeavor (3)
TECH 408 - Industrial Conference and Meeting Management (3)

Special Requirements

Students interested in pursuing a commission in the United States Army should contact the Department of Military Science chair concerning contract eligibility and advanced course requirements as early as possible but preferably not later than the second semester of their sophomore year. Elective course selection for contracted students must include as a minimum 3 semester hours in military history or an approved equivalent.

Course List

Basic

101. LEADERSHIP AND PERSONAL DEVELOPMENT (2). Introduction to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as goal setting, stress management, physical fitness, and time management relate to leadership, officership, and the Army profession. Focus is placed on developing basic knowledge and comprehensions of Army Leadership Dimensions while gaining a larger understanding of the ROTC program, its purpose in the Army, and its advantages for the college student.

102. FOUNDATIONS IN LEADERSHIP (2). An overview of leadership fundamentals like problem solving, goal setting, listening skills, presenting briefs, providing feedback, and using effective writing skills. Cadets explore dimensions of leadership values, attributes, skills, and actions in the context of practical hands-on interactive exercises.

[1] Available to contracted cadets only.
[2] Also meets PME requirement for commissioning, may substitute for MILS 101, MILS 102, MILS 201, and MILS 202.

201. INNOVATIVE TACTICAL LEADERSHIP (2). Explores the dimensions of creative and innovative tactical leadership strategies and styles by studying historical case studies and engaging in interactive student exercises. Cadets practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises. Focus is on continued development of the knowledge of leadership values and attributes through an understanding of rank, uniform, customs, and courtesies. Leadership case studies provide tangible context for learning the Soldier's Creed and Warrior Ethos. PRQ: MILS 101 and MILS 102, or military science minor, or consent of department.

202. LEADERSHIP IN CHANGING ENVIRONMENTS (2). Examines the challenges of leading in complex, contemporary operational environments. Dimensions of the cross-cultural challenges of leadership in a constantly changing world are highlighted and applied to practical Army leadership tasks and situations. Cadets develop greater self-awareness as they practice communication and team building skills. Case studies provide insight into the importance and practice of teamwork and tactics in real-world scenarios. PRQ: MILS 201, or military science minor, or consent of department.

Advanced

301. ADAPTIVE TEAM LEADERSHIP (3). Challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented in the ROTC Leader Development Assessment Course (LDAC). Challenging scenarios related to small unit tactical operations are used to develop self-awareness and critical thinking skills. Cadets receive systematic and specific feedback on their leadership activities. Cadets begin to analyze and evaluate their own leadership values, attributes, skills, and actions. PRQ: MILS 201 and MILS 202, or military science minor, or consent of department.

302. LEADERSHIP UNDER FIRE (3). Consists of increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skills in ethical decision making, persuading, and motivating team members when "under fire" are explored, evaluated, and developed. Aspects of military operations are reviewed as a means of preparing for the ROTC Leader Development Assessment Course (LDAC). Cadets are expected to apply basic principles of the Law of Land Warfare, Army training, and motivation to troop leading procedures. Emphasis is also placed on conducting military briefings and developing proficiency in Garrison operations orders. MILS 302 cadets are evaluated on what they know and do as leaders. PRQ: MILS 301, or military science minor, or consent of department.

325. BASIC INTERNSHIP IN MILITARY SCIENCE (8). An internship in military science, primarily oriented toward the assessment of leadership potential and the development of basic leadership skills, consisting of general military subjects, physical training, familiarization with individual and crew served weapons, individual and small unit tactics, and an introduction to leadership. Follows the Program of Instruction for Reserve Officer Training Corps Leadership Training Course, normally held at Fort Knox, Kentucky. Not open for credit to students having credit in MILS 101, MILS 102, MILS 201, and MILS 202. PRQ: Consent of department.

350. ADVANCED INTERNSHIP IN MILITARY SCIENCE (3). An internship in military science with the U.S. Army. Designed for students to apply Basic Officer Leadership Course I subjects including operations and tactics, preventive medicine and first aid, weapons, and leadership skills. Follows the Program of Instruction for Reserve Officer Training Corps Leadership Development and Assessment Course, normally held at Fort Lewis, Washington. PRQ: MILS 301 and MILS 302.

401. DEVELOPING ADAPTIVE LEADERS (4). Develops proficiency in planning, executing, and assessing complex operations; functioning as a member of a staff, and providing leadership performance feedback to subordinates. Both classroom and battalion leadership experiences are designed to prepare students for their first unit of assignment. Cadets identify responsibilities of key staff, coordinate staff roles, and use situational opportunities to teach, train, and develop subordinates. PRQ: MILS 301 and MILS 302, or military science minor, or consent of department.

402. LEADERSHIP IN A COMPLEX WORLD (4). Explores the dynamics of leading in the complex situations of current military operations. Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in light of international terrorism. Aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support are examined and evaluated. Significant emphasis is placed on preparing cadets for their first unit of assignment. Case studies, scenarios, and exercises are used to prepare cadets to face the complex ethical and practical demands of leading as commissioned offers in the U.S. Army. PRQ: MILS 401, or military science minor, or consent of department.

495. INDEPENDENT STUDY (3). Individual study involving special readings, topics, and a research project in military science under the direction of a faculty member. Written report required. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

Air Force ROTC

NIU students may enroll in Air Force ROTC through 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 and pay up to full tuition and fees and a monthly subsistence allowance. Illinois State Tuition Waivers are also available to qualified students. All members of the professional officer course also receive the monthly subsistence allowance. The Air Force ROTC courses are taught at IIT. For more information on Air Force ROTC, call (312) 567-3525/3526 or stop by the Stuart Building (IIT campus) in Chicago. The IIT detachment website is http://www.afrotc.iit.edu/.

Military Science Faculty

Lieutenant Colonel Craig A. Engel, M.M.A.S., Command and General Staff College, professor, chair

Major Peter Yedinak, M.A., University of South Florida, assistant professor

Captain Dale W. Burbank, B.S., United States Military Academy, assistant professor

School of Nursing (NURS)

Admission to the major in the School of Nursing is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

The School of Nursing offers the B.S. degree with a major in nursing, successful completion of which allows the graduate to write the National Council Licensure Examinations (NCLEX-RN) required for licensure as a registered professional nurse (R.N.). The Illinois Department of Professional Regulation requires a criminal background check prior to taking the NCLEX-RN examination. An R.N. degree-completion program is offered to registered nurses who want to earn a baccalaureate degree in nursing.

The nursing program at NIU prepares the professional nurse for leadership roles in patient care within the entire spectrum of health care agencies and settings. A variety of agencies in northern Illinois are used as clinical laboratory facilities for students. Experiences in the clinical settings are chosen to augment and demonstrate selected aspects of nursing theory. Graduates are prepared to function with baccalaureate competencies in the delivery of nursing care, in the improvement of health care delivery systems, in utilizing the knowledge of the physical and social sciences as integral aspects of nursing, and in entering graduate programs to increase their nursing competencies and skills. The baccalaureate curriculum is approved by the Committee on Nursing of the Illinois Department of Professional Regulation and accredited by the Commission on Collegiate Nursing Education.

Criminal Background Checks and Drug Screening

Students are required to undergo criminal background checks and drug screening. The School of Nursing is unable to place students in a clinical setting if they have a positive drug screen or criminal background check; therefore, the student will not be able to complete the program of required courses.

General Information

Only students admitted as undergraduate nursing majors may enroll in the undergraduate nursing courses, with the exception of NURS 300 which is open to non-nursing majors. Admitted students must have all prerequisite courses completed with a grade of C or better to begin nursing courses. Transfer students are encouraged to contact a program adviser before enrolling to determine whether prior course work satisfies prerequisites. Exceptions may be considered on a case-by-case basis for graduate students in nursing who need to eliminate deficiencies. New freshman and transfer students who enroll as full-time students must plan on a minimum of five semesters to complete the required nursing courses. Full-time registered nurse degree-completion students must plan on at least two semesters to complete the required nursing courses. See "Admission" for further information.

In addition to the usual costs for a university student, the nursing major will be responsible for the costs involved in

- student nurse uniforms to be worn in all clinical courses; equipment, e.g., a watch with sweep second hand and a stethoscope;
- providing own transportation for the clinical courses NURS 310A, NURS 320, NURS 330, NURS 340, NURS 360, NURS 410T, NURS 420, and NURS 430;
- professional liability insurance;
- criminal background checks and drug screening; and fees for certain courses.

Students enrolled in clinical nursing courses (NURS 310A, NURS 320, NURS 330, NURS 340, NURS 360, NURS 410T, NURS 420, and NURS 430) must

- complete all prerequisites.
- obtain a clinical permit to register (except for NURS 310A).
- provide own transportation (public transportation may be available to limited clinical sites.)
- provide evidence of completion of immunizations, current CPR certification, current professional liability insurance, and other proofs as listed in the "Clinical Requirements" statement provided by the School of Nursing.

R.N.-B.S. in Nursing Completion Program

The R.N.-B.S. in nursing completion program is designed to award credit to registered nurses for their recent education and previous learning experiences in the field of nursing. Upon successful completion of the bridge course, NURS 300, or NURS 346, the R.N. student will receive 32 semester hours of credit for NURS 310A, NURS 310T, NURS 311, NURS 316, NURS 317, NURS 320, NURS 321, NURS 322, NURS 330, NURS 340, NURS 360, NURS 410T, and NURS 436. This credit will be held in "escrow" and will be posted to the student's transcript upon successful completion of 12 semester hours of nursing credit with a grade of C or better.

Registered nurses who graduated over five years ago from a nursing program will automatically be granted the appropriate number of escrow credits provided they have practiced as a registered nurse within the last two years. Registered nurses who graduated more than five years ago who have not practiced as a registered nurse within the last two years will need to demonstrate competency through successful completion of the Regents Examinations for Medical-Surgical Nursing, Psychiatric Mental Health Nursing, and Pediatric and Obstetrical Nursing. In order to receive a baccalaureate degree, the R.N.-B.S. completion student is required to complete the following courses with a grade of C or better: NURS 300 or NURS 346, NURS 301, NURS 306, NURS 306A, NURS 309, NURS 401, NURS 420 and NURS 430 or NURS 460, NURS 424, and NURS 429.

It is highly recommended that students intending to transition into the master's program see the academic adviser to plan their sequence of courses early in their program of study.

Academic Standing

Nursing applicants and nursing majors must achieve a minimum grade of C or better in all nursing prerequisite courses that are taken before and after admission to the nursing major.

Freshman nursing students must achieve a 2.50 GPA at the completion of the second semester or be dismissed from the nursing program. R.N. students whose cumulative GPA falls below 2.50 after completing 9 semester hours at NIU will be dismissed from the nursing major. All other nursing students whose cumulative GPA is less than 2.50 will be dismissed from the nursing program. A nursing student who receives two grades of D or F in any combination of NURS courses will be dismissed from the School of Nursing. A student also may be dismissed from

the nursing major for unprofessional behavior or actions which threaten the health and safety of patients. It is the responsibility of students to secure a copy of the dismissal policy from the office of the School of Nursing.

Students must repeat any required nursing course in which they receive a grade of D or F and receive a grade of C or better to progress in the nursing curriculum. See "Repeating a Course."

Essential Performance Components

All students interested in enrolling and remaining in the undergraduate or graduate nursing program at NIU must possess performance component skills necessary to assess a patient's biopsychosocial needs and to analyze collected data in order to identify patient problems, plan and implement independent and collaborative interventions, and evaluate the care provided and the patient's responses to care. Specific observation, communication, motor cognitive, psychosocial, and behavioral requirements provide candidates with the ability to carry out the responsibilities of a student nurse providing direct or indirect patient care. A student must, with or without reasonable accommodation, possess these performance component skills upon admission to the School of Nursing and maintain these essential components throughout the program.

Manual Dexterity–use sterile technique; insert catheters (Foley, NG, IV); perform venipunctures; prepare medications and administer (PO, IM, IV); manipulate small objects (lancet, stopcock); open and close medication containers.

Mobility–remain at patient's side for a prolonged period of time for purposes of monitoring and frequent assessments; perform CPR; assist in lifting and moving patients and patient care materials (bed, chair); move independently to and from patient care areas.

Processing Patient Information–respond to communication by patients with or without direct view of patient's face; respond to monitor alarms, emergency signals, call bells from patients, and orders in a rapid and effective manner; accurately assess blood pressures, heart, lung, vascular, and abdominal sounds; accurately read a thermometer; identify cyanosis, absence of respirations, and movements of patients rapidly and accurately; accurately process information on medical containers, physicians' orders, and monitor and equipment calibrations, printed documents, flow sheets, graphic sheets, medication administration records, and other medical records.

Math Competency–tell time; use measuring tools (tape measure, scale); add, subtract, multiply, and divide; record numbers; calculate medication dosages (PO, IM, IV) and intravenous solution rates.

Emotional Stability–provide emotional support to patients; adapt rapidly to environmental changes and multiple task demands (new admission, patient going to therapy or surgery); maintain adequate concentration and attention in patient care settings; maintain behavioral decorum in stressful situations (avoid inappropriate laughter, jokes, comments).

Cognitive Processing–transfer knowledge from one situation to another (classroom to patient care); assess patient needs based on understanding and synthesis of patient information (know comorbidities, complex problems); develop effective care plans based on assessments; prioritize tasks to ensure patient safety and standards of care (administer medications and treatments on time); organize and retain information in basic knowledge and skills areas (frequently administer medications and treatments).

Critical Thinking–identify cause and effect relationships (religious, ethnic, cultural); sequence information in a manner that is logical and understood by others; make sound clinical judgments and decisions based on standards of nursing care; seek assistance when clinical situation requires a higher level of expertise/experience.

Interpersonal/Communication Skills–respect differences in patients; establish and maintain effective working relations with patients and co-workers; teach and provide information in an accurate and effective manner; report critical patient information to other caregivers; convey information to others through graphic, print, and/or electronic media in an accurate, timely, and comprehensible manner.

Major in Nursing (B.S.)

Requirements in School (55-58)

NURS 300 - Professional Nursing (2),
  OR NURS 346[1] - Concepts, Issues, and Interpersonal Strategies in Professional Nursing (3)
NURS 301 - Research in Nursing (3)
NURS 306 - Health Assessment (2)
NURS 306A - Health Assessment Learning Laboratory (1)
NURS 309 - Alterations in Biological Systems (3)
NURS 310A[2] - Clinical Development I (2)
NURS 310T[2] - Fundamental Nursing (2)
NURS 311[2] - Mental Health Nursing (3)
NURS 316[2] - Adult Health Nursing I (3)
NURS 317[2] - Adult Health Nursing II (3)
NURS 320[2] - Clinical Development II (2)
NURS 321[2] - Parent-Child Health Nursing (3)
NURS 322[2] - Child Health Nursing (3)
NURS 330[2] - Clinical Development III (2)
NURS 340[2] - Clinical Development IV (2)
NURS 360 - Clinical Development V (2)
NURS 401 - Processes for Nursing Leadership (2)
NURS 410T[2] - Clinical Development VI (2)
NURS 420 - Clinical Development VII (2), and NURS 430 - Clinical Development VIII (4),
  OR NURS 460[1] - Clinical Development: Leadership/Management in Aggregate-Focused Nursing Care (4)
NURS 424 - Community Health Nursing (3)
NURS 429 - Seminar in Professional Nursing (3)
NURS 436[2] - Pharmacology (3)

Requirements outside School (33-36)

*BIOS 104 - General Biology (4)
BIOS 213 - Introductory Bacteriology (3),
  OR BIOS 313 - Microbiology (4)
BIOS 357 - Human Anatomy and Physiology (5)
*CHEM 110 - Chemistry (3),
  OR *CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*ENGL 104 - Rhetoric and Composition II (3),
  OR *ENGL 105 - Rhetoric and Composition (3)
*FCNS 201 - Human Nutrition (3)
*FCNS 280 - Human Development, the Family, and Society (3),
  OR *PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
*PSYC 102 - Introduction to Psychology (3)
*STAT 208 - Basic Statistics (3),
  OR STAT 301 - Elementary Statistics (4)

Total Hours for a Major in Nursing: 88-94

Off-Campus Degree Program

Registered nurses who are seeking baccalaureate preparation leading to a B.S. degree with a major in nursing are served by courses offered at a number of off-campus sites. Off-campus course requirements coincide with on-campus requirements in the degree completion program. Students wishing additional information should contact the School of Nursing.

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* Available for general education credit.
[1] For Registered Nurse students only.
[2] Requirements can be met through escrow credit/proficiency testing for R.N.-B.S. students.

Course List

300. PROFESSIONAL NURSING (2). Introduction to a systems approach to culturally competent nursing care within health care systems. Role of the professional nurse in using biopsychosocial concepts, principles, and processes in the enhancement of the health of diverse client systems. PRQ: PSYC 102 and a general education course in either the humanities or social sciences. CRQ: ENGL 104 or ENGL 105, or consent of school.

301. RESEARCH IN NURSING (3). Critical thinking skills and principles and methodology of the research process. Role of the culturally competent professional nurse as research consumer, critic, and participant. PRQ: An introductory statistics course or R.N. status. CRQ: NURS 317, NURS 322, R.N. status, or consent of school.

302. NURSING ASPECTS OF HUMAN GROWTH AND DEVELOPMENT (3). Nursing implications of the prevailing theories of human growth and development. Factors affecting growth and development throughout the life cycle. PRQ: PSYC 102 and SOCI 170.

306. HEALTH ASSESSMENT (2). Theoretical bases for assessing the health status of culturally diverse individuals across the lifespan. Introduction to the role of the professional nurse in identifying and communicating normal findings and common deviations from normal. PRQ: BIOS 213, BIOS 357, and FCNS 280. CRQ: NURS 300 or R.N. status, and NURS 306A.

306A. HEALTH ASSESSMENT LEARNING LABORATORY (1). Development and application of the cognitive and psychomotor skills necessary to perform a systematic, holistic, and culturally competent health assessment for individuals across the lifespan. PRQ: BIOS 213, BIOS 357, and FCNS 280. CRQ: NURS 300 or R.N. status, and NURS 306.

309. ALTERATIONS IN BIOLOGICAL SYSTEMS (3). Theoretical bases of alterations in physiological processes that impair health in culturally diverse individuals. Introduction to the role of the professional nurse in using culturally competent intervention strategies in the enhancement of physical health. CRQ: NURS 300, with a grade of C or better, or consent of school.

310A. CLINICAL DEVELOPMENT I (2). Acquisition and application of beginning competencies in psychomotor and psychosocial processes basic to the care of culturally diverse adult clients experiencing alterations in health in a laboratory and structured clinical setting. Individual transportation required. CRQ: NURS 300, NURS 306, NURS 306A, NURS 309, and NURS 310T, or consent of school.

310T. FUNDAMENTAL NURSING (2). Foundational nursing concepts and processes used in enhancement of health among culturally diverse clients. CRQ: NURS 300, NURS 306, NURS 306A, NURS 309, and NURS 310A, or consent of school.

311. MENTAL HEALTH NURSING (3). Theoretical bases of processes used in the enhancement of the mental health of culturally diverse individuals, families and groups. Introduction to the role of the professional nurse in using culturally competent intervention strategies in the enhancement of mental health. PRQ: NURS 306, NURS 306A, NURS 309, NURS 310A, and NURS 310T, with a grade of C or better. CRQ: NURS 340.

316. ADULT HEALTH NURSING I (3). Theoretical bases of processes used in the enhancement of the health of culturally diverse adults in barrier protection, nutrition, and elimination; metabolism and energy balance; and cognition and movement. Role of the professional nurse in the provision of culturally competent nursing care to adults. PRQ: NURS 306, NURS 306A, NURS 309, NURS 310A, and NURS 310T, and FCNS 201. CRQ: NURS 320.

317. ADULT HEALTH NURSING II (3). Continuation of NURS 316 with an emphasis on fluid and gas transport; elimination; and sensation and reproduction. PRQ: NURS 311, NURS 316, NURS 320, NURS 340, with a grade of C or better. CRQ: NURS 330.

320. CLINICAL DEVELOPMENT II (2). Application of processes used in the enhancement of the health of culturally diverse individuals across the lifespan. Emphasis on the roles of the professional nurse as beginning care giver and communicator in a structured clinical setting. Individual transportation required. PRQ: NURS 306, NURS 306A, NURS 309, NURS 310A, and NURS 310T, with a grade of C or better, and FCNS 201. CRQ: NURS 316. Permit only.

321. PARENT-CHILD HEALTH NURSING (3). Theoretical bases of the processes associated with reproduction. Study of the interaction between health and development of individuals in the child-bearing family. Role of the professional nurse in the enhancement of the health of culturally diverse individuals and family systems. PRQ: NURS 311, NURS 316, NURS 320, NURS 340, with a grade of C or better. CRQ: NURS 360.

322. CHILD HEALTH NURSING (3). Study of the interaction between health and development of children and their family. Role of the professional nurse in the enhancement of the health of children and the culturally diverse family system. PRQ: NURS 317, NURS 321, NURS 330, NURS 360, and NURS 436, with a grade of C or better. CRQ: NURS 410T.

330. CLINICAL DEVELOPMENT III (2). Application of processes for the enhancement of the health of culturally diverse adults in structured clinical settings. Emphasis on the roles of the professional nurse as beginning teacher and research consumer. Individual transportation required. PRQ: NURS 311, NURS 316, NURS 320, and NURS 340, with a grade of C or better. CRQ: NURS 317 or consent of school. Permit only.

340. CLINICAL DEVELOPMENT IV (2). Application of processes for the enhancement of the mental health of culturally diverse individuals, families, and groups in structured clinical settings. Continued emphasis on the roles of the professional nurse as beginning teacher and research consumer. Individual transportation required. PRQ: NURS 306, NURS 306A, NURS 309, NURS 310A, NURS 310T, with a grade of C or better. CRQ: NURS 311 or consent of school. Permit only.

346. CONCEPTS, ISSUES, AND INTERPERSONAL STRATEGIES IN PROFESSIONAL NURSING (3). Characteristics and roles of the professional nurse based on historical, legal, and professional trends. Examination of social and political dimensions of professional practice. Development of therapeutic communication skills. Introduction to use of systems theory in the provision of culturally competent nursing care. PRQ: R.N. status or consent of school. Permit only.

350. INDIVIDUAL STUDY IN NURSING (1 to 3). Qualified students pursue an in-depth study into particular problems or areas of nursing. May be repeated to a maximum of 6 semester hours. PRQ: Written permission of school chair.

360. CLINICAL DEVELOPMENT V (2). Integration of processes for the enhancement of the health of culturally-diverse individuals in the childbearing family in diverse clinical settings. Emphasis on the role of the professional nurse as caregiver and advocate. Individual transportation required. PRQ: NURS 316, NURS 320, NURS 311, and NURS 340, with a grade of C or better. CRQ: NURS 321. Permit only.

380. NURSING CARE OF WOMEN (3). Overview of current concepts, issues, and research in the field of women's health. Emphasizes nursing management of selected health needs of women in acute care and community settings. PRQ: NURS 322 or consent of school.

400. CARE OF INDIVIDUALS WITH ACUTE ILLNESSES (2). Provision of culturally competent care to acutely ill individuals and their families using systems theory. PRQ: NURS 317, NURS 322, NURS 330, and NURS 340, with a grade of C or better. CRQ: NURS 410 or consent of school.

401. PROCESSES FOR NURSING LEADERSHIP (2). Theoretical bases of the processes used to provide leadership in managing care for culturally diverse individuals, families, and groups across the lifespan in diverse settings. Roles of the culturally competent professional nurse in planning, organizing, directing, and controlling resources for health care. PRQ: NURS 340, NURS 410T, NURS 420, NURS 424, with a grade of C or better, or R.N. status. CRQ: NURS 430.

410T. CLINICAL DEVELOPMENT VI (2). Integration of processes for the enhancement of the health of culturally diverse individuals in the child-rearing family in diverse clinical settings. Emphasis on the role of the professional nurse as caregiver and advocate. Individual transportation required. PRQ: NURS 317, NURS 321, NURS 330, NURS 360, and NURS 436, with a grade of C or better. CRQ: NURS 322. Permit only.

420. CLINICAL DEVELOPMENT VII (2). Integration of processes for the enhancement of the health of culturally diverse individuals, families, and aggregates or populations in community settings. Emphasis on the development of both collaborative and independent culturally competent practice. Individual transportation required. PRQ: NURS 317, NURS 321, NURS 330, NURS 360, and NURS 436, with a grade of C or better. CRQ: NURS 424 or consent of school. Permit only.

424. COMMUNITY HEALTH NURSING (3). Theories and principles of community health nursing. Role of the professional nurse in the enhancement of the health of aggregates or populations. Emphasis on collaboration with the multidisciplinary team and diverse populations. PRQ: NURS 317, NURS 321, NURS 330, NURS 360, and NURS 436 with a grade of C or better, or R.N. status. CRQ: NURS 420.

429. SEMINAR IN PROFESSIONAL NURSING (3). Synthesis of theories, principles, concepts, and processes relating to the enhancement of the health of culturally diverse individuals, families, groups, and communities from the perspective of a systems approach across the lifespan. Transition to the role of professional nurse. PRQ: NURS 322, NURS 410T, NURS 420, NURS 424, and NURS 436, with a grade of C or better or R.N. status.

430. CLINICAL DEVELOPMENT VIII (4). Synthesis of processes for the enhancement of health across the lifespan. Emphasis on leadership in the management of care for culturally diverse individuals, families, and groups in a community- or hospital-based setting. Community-based placements focus on leadership roles such as program development, grant writing, administration, and/or case management. Hospital-based placements focus on direct patient care and leadership. Individual transportation required. PRQ: NURS 322, NURS 410T, NURS 420, and NURS 424, with a grade of C or better. CRQ: NURS 401. Permit only.

433. CRITICAL CARE NURSING (3). Nursing care of the acutely ill patient in the specialized hospital setting. Stresses understanding of the disease process and the medical and nursing therapy involved in the more common medical crisis situations. PRQ: NURS 317 and NURS 330, or consent of school.

436. PHARMACOLOGY (3). General principles of pharmacology as they affect client systems and the role of the nurse in drug administration. Major drug categories addressed in terms of mechanism of action, therapeutic effects, side effects, and nursing implications. PRQ: NURS 311, NURS 316, NURS 320, and NURS 340.

460. CLINICAL DEVELOPMENT: LEADERSHIP/MANAGEMENT IN AGGREGATE-FOCUSED NURSING CARE (4). Synthesis of processes for enhancement of health across the lifespan. Emphasis on leadership and management applied to health care organizations and the care of culturally diverse aggregates in a community setting. CRQ: R.N. status, NURS 401, NURS 424, or consent of school. Permit only.

470. SEMINAR IN NURSING SPECIALTIES (1 to 3). Explorations of solutions to problems and experimentation with new formats for communicating relevant data relating to the delivery of health care by nursing personnel. May be repeated to a maximum of 9 semester hours if topic changes.

480. SPECIAL TOPICS IN NURSING (1 to 3). Exploration of topics of special interest in a particular area of nursing. May be repeated to a maximum of 9 semester hours if topic changes.

487. NURSING AND THE LAW (3). Legal aspects of professional issues and problems in the health fields relating to the nurse and society.

495. NURSING IN INTERNATIONAL HEALTH SYSTEMS (3). Comparative analysis of the role and contribution of nursing in international health systems. PRQ: NURS 424 or consent of school.

499H. SENIOR PROJECT IN NURSING (1 to 3). Individual study in nursing for students seeking an Honors capstone experience. May be repeated to a maximum of 6 semester hours.

Nursing Faculty

Brigid Lusk, Ph.D., University of Illinois, Chicago, associate professor, acting chair
Karen Baldwin, Ph.D., University of Illinois, Chicago, assistant professor
Virginia Cassidy, Ed.D., Northern Illinois University, professor
Sharon Coyer, Ph.D., Loyola University, associate professor
Patricia G. Fox, Ph.D., University of Illinois, Chicago, associate professor
Judith E. Hertz, Ph.D., University of Texas at Austin, associate professor
Mary Koren, D.N.Sc., Rush University, assistant professor
Ayhan Lash, Ph.D., University of Chicago, professor
Donna Munroe, Ph.D., University of Southern California, associate professor
Donna Plonczynski, Ph.D., University of Illinois, Chicago, assistant professor
Judy Popovich, D.N.Sc., Rush University, associate professor
Lola Prince, Ph.D., Loyola University, Chicago, assistant professor
Julie Robertson, Ed.D., Northern Illinois University, professor
Jeanette Rossetti, Ed.D., Northern Illinois University, assistant professor

College of Liberal Arts and Sciences

Joseph E. Grush, Ph.D., acting dean
Sue Warrick Doederlein, Ph.D., associate dean
W. William Minor, Ph.D., associate dean
Carla Montgomery, Ph.D., acting associate dean

The departments of the College of Liberal Arts and Sciences offer baccalaureate programs leading to the degrees Bachelor of Arts (B.A.), and Bachelor of Science (B.S.). The College of Liberal Arts and Sciences offers a contract major leading to a B.A. or B.S. degree or to the degree Bachelor of General Studies (B.G.S.).

Department Names and Undergraduate Programs Offered

Department of Anthropology
B.A. and B.S. in anthropology

Department of Biological Sciences
B.S. in biological sciences

Department of Chemistry and Biochemistry
B.S. in chemistry

Department of Communication
B.A. and B.S. in communication studies
B.A. and B.S. in journalism

Department of Computer Science
B.S. in computer science

Department of Economics
B.A. and B.S. in economics

Department of English
B.A. in English

Department of Foreign Languages and Literatures
B.A. in French
B.A. in German
B.A. in Russian
B.A. in Spanish

Department of Geography
B.A. and B.S. in geography
B.S. in meteorology

Department of Geology and Environmental Geosciences
B.S. in geology and environmental geosciences

Department of History
B.A. and B.S. in history

Department of Mathematical Sciences
B.S. in mathematical sciences

Department of Philosophy
B.A. in philosophy

Department of Physics
B.S. in physics

Department of Political Science
B.A. and B.S. in political science

Department of Psychology
B.A. and B.S. in psychology

Department of Sociology
B.A. and B.S. in sociology

College Mission Statement

The College of Liberal Arts and Sciences fosters the generation, dissemination, and preservation of knowledge as the foundation of a liberal education. The mission of the college is to provide high-quality education that contributes to the intellectual growth, self-discovery, and enhanced expertise of all members of the university community. The college makes available to the widest possible audience the rich cultural and scientific legacy represented by the disciplines that make up the liberal arts and sciences. Because bodies of knowledge do not exist in isolation, the college promotes interdisciplinary inquiry and is committed to the integration of teaching, scholarship, and service. The research and scholarship in the college permeate teaching and service, generating a wide range of opportunities for faculty and students to work together in transmitting, expanding, and applying knowledge. The college programs are designed to serve the university, its students, and the residents of the region, the country, and the world. These programs link basic and applied research and scholarly endeavors to the interests and needs of individuals and society.

Liberal Arts and Sciences Advising and Counseling Office

The College of Liberal Arts and Sciences maintains an Advising and Counseling Office to assist students in establishing their academic goals, planning their schedules, and interpreting university, college, and departmental policies and requirements. All freshmen and sophomores enrolled in a program in the College of Liberal Arts and Sciences or undecided on a major within the college are advised by this office. Juniors and seniors are advised by the college's departments; the Advising and Counseling Office offers these students auxiliary advising services.

Special Requirements in the College of Liberal Arts and Sciences

In addition to the general university requirements, a student seeking a baccalaureate degree in the College of Liberal Arts and Sciences must complete the requirements for a major as set forth by the department in which the major is offered. A student declaring a major must be in good academic standing at the time of the application for the major.

A candidate for the Bachelor of Arts or the Bachelor of Science degree who wishes to obtain a secondary teaching certificate should fulfill the professional education requirements for teacher certification outlined under "Teacher Certification Requirements," and should have a second teaching area. Preparation in a second teaching area both facilitates securing appropriate student teaching assignments and enhances the opportunities for employment. Majors in anthropology, economics, geography, history, political science, and sociology who expect to teach history in the secondary schools are advised to take at least 8 semester hours of American history.

A student may not count more than 50 semester hours from a single department toward the 120-semester-hour baccalaureate requirement. Any hours in excess of 50 in a single department must be balanced by an equal number of excess hours over the 120-hour minimum to be taken from outside that department. For example, if a student earns 55 semester hours of credit from the offerings of the Department of Anthropology, then that student must complete at least 125 semester hours to graduate. There are exceptions to this regulation in the case of students majoring in different divisions of the Department of Communication and the Department of Foreign Languages and Literatures. For example, the 50-semester-hour maximum applies to course work offered for a major in French, but does not exclude additional hours in another foreign language in the Department of Foreign Languages and Literatures. ENGL 103, ENGL 104, and ENGL 105 are not counted toward the 50-semester-hour maximum hours taken in the major in the Department of English. COMS 100 is not counted toward the 50-semester-hour maximum hours taken in the communication studies major in the Department of Communication. Students having questions about this regulation should contact the college's Advising and Counseling Office.

For some students, in-service exposure to their academic discipline may be desirable through courses identified as internships or courses which are part of the cooperative education program. In the College of Liberal Arts and Sciences, no more than 6 semester hours of credit in these courses may be applied toward the baccalaureate degree.

College Requirement for the B.S. Degree

Candidates for the degree Bachelor of Science in the College of Liberal Arts and Sciences must demonstrate competence in laboratory science/mathematical/computational skills equivalent to that attained through two years of regular college instruction (10-15 semester hours). This requirement may be met by completing one of the sequences listed below with at least a 2.00 GPA in the sequence. Students should note that the sequences listed below are intended to be minimum requirements for the B.S. degree and that some departments have additional course requirements in the laboratory/mathematical sciences for their majors. Students seeking the B.S. degree should check the catalog for the requirements of a particular major to determine which one of the following sequences to complete and what additional courses may be required for that major.

1. *MATH 206 or *MATH 210, *MATH 211, STAT 301, and one course chosen from CSCI 210, CSCI 220, CSCI 230, CSCI 240, CSCI 250
2. *MATH 229, MATH 230, and one course chosen from MATH 240, CSCI 210, CSCI 220, CSCI 230, CSCI 240, CSCI 250, STAT 350
3. *MATH 206 or *MATH 210, *MATH 211, and a two-semester laboratory sequence in other than the major department to be met by one of the following sequences.
   *BIOS 104 and BIOS 205T and BIOS 207, BIOS 213, or BIOS 357
   *CHEM 210T and *CHEM 212, *CHEM 211T and *CHEM 213
   *GEOG 101 and *GEOG 102, GEOG 302
   GEOG 256, GEOG 359
   *GEOL 120 and GEOL 121, GEOL 320
   *PHYS 210, *PHYS 211 *PHYS 253, *PHYS 273
4. *MATH 229 and a two-semester laboratory sequence in other than the major department to be met by one of the following sequences.
   *BIOS 104 and BIOS 205T and BIOS 207, BIOS 213, or BIOS 357
   *CHEM 210T and *CHEM 212, *CHEM 211T and *CHEM 213
   *GEOG 101 and *GEOG 102, GEOG 302
   *GEOG 105 and *GEOG 106, MET 300
   GEOG 256, GEOG 359
   *GEOL 120 and GEOL 121, GEOL 320
   *PHYS 210, *PHYS 211
   *PHYS 253, *PHYS 273
5. *MATH 211, STAT 301, and a two-semester laboratory sequence in other than the major department to be met by one of the following sequences.
   *BIOS 104 and BIOS 205T and BIOS 207, BIOS 213, or BIOS 357
   *CHEM 210T and *CHEM 212, *CHEM 211T and *CHEM 213
   *GEOG 101 and *GEOG 102, GEOG 302
   GEOG 256, GEOG 359
   *GEOL 120 and GEOL 121, GEOL 320
   *PHYS 210, *PHYS 211
   *PHYS 253, *PHYS 273

The Office of Testing Services administers a Mathematics Placement Examination to each student at the time of admission, interprets the test, and notifies the student of the result and the appropriate initial mathematics course. The student should also note that it is possible to take a proficiency test in any of the courses listed in the above sequences.

College Requirement for All Minors

In addition to the university requirement of a minimum GPA of 2.00, in order for the university to record on a student's transcript that a minor in the College of Liberal Arts and Sciences was successfully completed during the student's undergraduate program, 6 or more semester hours of the minor must have been earned at NIU.

College Requirement Concerning the Pass/Fail Option

In addition to the university's restrictions placed on courses which can be taken by students on the pass/fail basis, the College of Liberal Arts and Sciences imposes the following restrictions. Courses offered in a student's major or minor department cannot be taken on the pass/fail basis. Courses used to meet the college's special requirements for the B.S. degree and the university's foreign language requirement for the B.A. degree cannot be taken on the pass/fail basis. An exception exists in the Department of Communication; communication studies majors can take journalism elective courses (not in a major or minor program) on a pass/fail basis and journalism majors can take communication studies elective courses (not in a major or minor program) on a pass/fail basis.

Contract Major

The College of Liberal Arts and Sciences offers students opportunities for constructing two types of individualized programs of study which differ from the university's regular major and minor programs. These individualized programs, the B.A. or B.S. contract major and the general program in which a student earns a Bachelor of General Studies (B.G.S.) degree, utilize existing university courses.

Each of the two programs offered by Liberal Arts and Sciences addresses a different set of educational objectives. The contract major allows a student with unusual and well defined academic interests to design a major with the advice of a faculty sponsor. The general program, by contrast, requires no formal major; it is a minimally structured program built around a general curriculum of courses offered or approved by the College of Liberal Arts and Sciences. The general program is expected to appeal primarily to mature students with broad academic interests whose educational objectives do not include preparation for a specific professional career.

NOTE: The degree Bachelor of General Studies is not as well understood outside the university as traditional baccalaureate degrees. Students earning this degree may be required to convince prospective employers or graduate schools that the degree will enable them to succeed in a particular job or a future educational endeavor.

* Available for general education credit.

Admission

Students seeking admission to one of these programs in Liberal Arts and Sciences must have at least sophomore standing and must file an application for admission to the program with the College of Liberal Arts and Sciences. Forms can be obtained from the Advising Office of the College of Liberal Arts and Sciences.

Requirements for the B.A. or B.S. Contract Major

A student may formulate a proposal for a major program of study, appropriate to the College of Liberal Arts and Sciences, which differs substantially from existing major programs but utilizes existing courses. The student must select a faculty sponsor from the college's faculty and formulate the proposal in consultation with this sponsor. The program must be logically structured around a meaningful and interesting theme or topic. Some topics which have been proposed are environmental economics, noise control technology, Judaic studies, and biophysics. Other students have based contract major proposals on existing interdisciplinary minors such as environmental studies, Latin American studies, and international studies. Students desiring to build programs of this kind using a core of courses offered by either the College of Visual and Performing Arts or the College of Education should consult with those colleges. An example of such a program would be a contract major in scientific illustration, based on the School of Art's B.F.A. emphasis in illustration coupled with a considerable amount of course work from the Department of Biological Sciences. Students desiring programs involving a substantial amount of course work in colleges other than Education or Visual and Performing Arts should work with the College of Liberal Arts and Sciences, and will be required to secure a cosponsor from the discipline housing such course work. Programs proposals must be submitted through the Advising Office of the College of Liberal Arts and Sciences and must be approved by the college's Contract Major Committee.

The student who wishes to propose a contract major must

- have a cumulative GPA of at least 2.50.
- justify the new curriculum and define the goal to be achieved.
- design a multidisciplinary program that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects on or off campus, but no more than 12 semester hours of course work for these kinds of activities will be permitted in the contract.)
- include in the program at least 50 semester hours of credit in courses basic to the area of study. These 50 semester hours
  - may not be used to fulfill general education requirements,
  - must include at least 15 semester hours of course work offered by the College of Liberal Arts and Sciences,
  - must include at least 30 semester hours of course work at the 300-400 level, and
  - must not include more than 24 semester hours from the offerings of a single department.
- complete either the university foreign language requirement for the B.A. degree or the college requirement for the B.S. degree.

A student who completes an approved contract major and all other graduation requirements will receive either the B.A. degree or the B.S. degree with a contract major in _____ (the theme specified in the contract).

Requirements for the B.G.S. Degree

To receive the degree Bachelor of General Studies, a student must satisfy all university graduation requirements except those of a major. All courses in the College of Liberal Arts and Sciences and any other courses specified on the B.G.S. Evaluation of Credit form which were taken at NIU will be used to calculate the minimum 2.00 GPA required for graduation.

The student who wishes to earn a degree through the general program must

- earn at least 85 semester hours of credit in courses offered or approved by the College of Liberal Arts and Sciences with at least 30 of these hours in upper-division courses.
- successfully complete at least 15 semester hours in behavioral and social science courses. These include all courses offered by the Departments of Anthropology, Economics, Geography (except physical geography and meteorology courses), Political Science, Psychology, and Sociology.
- successfully complete at least 15 semester hours in life, mathematical, and physical science courses. These include all courses offered by the Departments of Biological Sciences, Chemistry and Biochemistry, Computer Science, Geology and Environmental Geosciences, Mathematical Sciences, and Physics, as well as courses in physical geography and meteorology. The course used to satisfy the core competency mathematics requirement of the General Education Program will *not* count in this area, however. (See "General Education Requirements.")
- successfully complete 15 semester hours in humanities courses. These include all courses offered by the Departments of Communication, English, Foreign Languages and Literatures, History, and Philosophy, except for ENGL 103, ENGL 104, ENGL 105, and COMS 100.
- complete at least 30 semester hours after formal admission to the general program.

Students following this program may apply no more than 25 semester hours in any one department toward the 120 semester hours required for graduation.

Students completing the general program will not receive formal recognition of the completion of a major or a minor on their permanent academic records.

Courses used to fulfill area requirements for the university's General Education Program may also be used to meet requirements in the second, third, and fourth areas above.

Dean's List Criteria

Through the Dean's List, the College of Liberal Arts and Sciences recognizes undergraduates whose academic performance has been outstanding. The Dean's List recognizes those students who achieve a GPA of 3.75 or higher (on a 4.00 scale) while completing a minimum of 12 graded semester hours within a fall or spring semester.

Interdisciplinary Minors

Any student completing the requirements for a baccalaureate degree may elect also to complete the requirements of an interdisciplinary minor. Successful completion of such requirements will be appropriately indicated on the transcript in conjunction with the student's major at the time of graduation. An interdisciplinary minor is not a baccalaureate requirement and may not be substituted for the requirement of a major in a student's degree program. Credit hours applied to satisfy the requirements for a major may not be counted again as satisfying the requirements for an interdisciplinary minor. An additional special restriction applies, as noted, to the minor in international studies.

Students with a second major may, with the approval of the coordinator, count semester hours applied to satisfy the requirements for one of the majors toward the requirements for an interdisciplinary minor. Students electing an interdisciplinary minor should contact the coordinator at an early point to make application and to receive guidance. Additional information about these minors can be obtained from the Advising Office of the College of Liberal Arts and Sciences.

Departments in the college also participate in the interdisciplinary minors in black studies, environmental management systems, and gerontology.

Minor in Applied Communication

Coordinators: Directors of Undergraduate Studies in the Departments of English and Communication

This minor alone does not meet secondary certification requirements in the areas of English or communication studies.

The interdisciplinary minor in applied communication offers majors in departments other than communication and English an opportunity to improve their communication abilities through study in courses focusing on practical communication skills, including those in written and oral composition, interpersonal communication, and persuasion. The minor in applied communication is recommended to students in various professional fields such as education, finance, journalism, management, marketing, nursing, and pre-law, where communication skills are perceived to be valuable supportive tools.

Requirements (18)

Three of the following (9)
- COMS 200 - Public Speaking (3)
- COMS 201 - Group Discussion Skills (3)
- COMS 203 - Interpersonal Communication Skills (3)
- COMS 300 - Speech Writing (3)
- COMS 305 - Argumentation and Debate (3)
- COMS 309 - Performance in Speech Communication (3)
- COMS 355 - Media Writing (3)
- COMS 357 - Introduction to Studio Production (3)
- COMS 359 - Interactive Media Production I (3)
- COMS 450X - Instructional Video I (3)
- COMS 467 - Corporate Scriptwriting (3)
- JOUR 200A or JOUR 200B - Basic News Writing (3)
- JOUR 312 - Graphics of Communications (3)
- JOUR 315 - Press Photography (3)
- JOUR 415 - Advanced Photojournalism (3)

Three of the following, with at least one from ENGL 300, ENGL 308, ENGL 403 (9)
- ENGL 207 - Fundamentals of English Grammar (3)
- ENGL 300 - Advanced Essay Composition (3)
- ENGL 303 - Writing Creative Nonfiction (3)
- ENGL 304 - Writing Arts Criticism (3)
- ENGL 308 - Technical Writing (3)
- ENGL 318 - Language and Linguistics (3)
- ENGL 398 - Topics in the Practice and Theory of Composition (3)
- ENGL 403 - Technical Editing (3)
- ENGL 424 - Topics in Technical Writing (3)
- ENGL 432 - Topics in General Linguistics (3)
- ENGL 434X - Women, Men, and Language (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Chinese/Japanese Studies

Coordinator: Katharina Barbe, Department of Foreign Languages and Literatures

The interdisciplinary minor in Chinese/Japanese studies offers students an opportunity to gain in-depth knowledge of cultural, historical, economic, and sociological issues pertaining to the Far East, particularly Japan and China, while becoming more proficient in either Chinese or Japanese.

Knowledge of Chinese or Japanese is useful for students who anticipate careers in government (particularly in foreign service) or in international business or academic institutions which offer programs dealing directly or peripherally with China and/or Japan.

Students electing this interdisciplinary minor should declare the minor at the office of the division coordinator of German, Russian, Classics, and Asian Languages, Watson Hall 120.

Option 1. Chinese Studies (21)

FLCH 101 - Beginning Chinese I (3)
FLCH 102 - Beginning Chinese II (3)
FLCH 201 - Intermediate Chinese I (3)
FLCH 202 - Intermediate Chinese II (3)
FLCH 361 - Introduction to Chinese Culture (3)
Two of the following from departments other than the student's major (6)
- ARTH 379A - Far Eastern Art: China (3)
- ECON 341A - Economic Area Studies: Asia (3)
- FLCH 311 - Advanced Chinese Conversation (3)
- FLCH 320 - Advanced Chinese Reading (3)
- FLCH 381 - Introduction to Chinese Language and Business Practices (3)
- HIST 140 - Asia to 1500 (3)
- HIST 141 - Asia Since 1500 (3)
- HIST 344 - History of Ancient China (3)
- HIST 345 - History of China Since the T'ang Dynasty (3)
- HIST 346 - Women in Asian History (3)
- HIST 445 - The Chinese Revolution (3)
- HIST 470 - America and Asia (3)
- HIST 498J - Special Topics in History: Asian (3)
- MUSC 432 - Music of China (3)
- PHIL 382 - Chinese Philosophy (3)
- POLS 372 - Politics of China, Japan, and Korea (3)
- POLS 387 - East Asia and International Politics (3)

Option 2. Japanese Studies (21)

FLJA 101 - Beginning Japanese I (3)
FLJA 102 - Beginning Japanese II (3)
FLJA 201 - Intermediate Japanese I (3)
FLJA 202 - Intermediate Japanese II (3)
FLJA 362 - Introduction to Japanese Culture (3)
Two of the following from departments other than the student's major (6)
- ARTH 379B - Far Eastern Art: Japan (3)
- ECON 341 - Economic Area Studies: Asia (3)
- FLJA 301 - Advanced Japanese Grammar and Composition I (3)
- FLJA 302 - Advanced Japanese Grammar and Composition II (3)
- FLJA 311 - Advanced Japanese Conversation (3)
- FLJA 321 - Introduction to Japanese Literature (3)
- FLJA 381 - Introduction to Japanese Language and Business Practices (3)
- FLJA 411 - Modern Japanese (3)
- HIST 140 - Asia to 1500 (3)
- HIST 141 - Asia Since 1500 (3)
- HIST 346 - Women in Asian History (3)
- HIST 350 - Japan to 1600 (3)
- HIST 351 - Japan Since 1600 (3)
- HIST 352 - Popular Culture in Japan (3)
- HIST 470 - America and Asia (3)
- HIST 498J - Special Topics in History: Asian (3)
- POLS 372 - Politics of China, Japan, and Korea (3)
- POLS 387 - East Asia and International Politics (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Classical Studies

Coordinator: Antoinette Brazouski, Advisory Committee on Interdisciplinary Minor in Classical Studies

The interdisciplinary minor in classical studies offers undergraduates a structured curriculum covering various aspects of the study of classical antiquity. Completion of the minor requires satisfactory completion of at least 24 semester hours from the following courses. Courses must be focused on no more than three different subject areas. No course may be counted toward

both the minor and the student's major. Total semester hour requirements may be reduced if language courses are waived on the basis of high school preparation or placement examination. No more than 6 semester hours of courses offering general education credit may be counted towards electives.

Requirements (24)

FLCL 101 and FLCL 102[1] - Elementary Latin (3, 3)
FLCL 201 and FLCL 202[1] - Intermediate Latin (3, 3)
HIST 303 - History of Ancient Rome (3)
Three of the following (9)
No more than 6 semester hours may be taken in any one nonlanguage area.
*ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 388A - Ancient Art II: Preclassical Art (3)
*ARTH 388B - Ancient Art II: Classical Art (3)
ARTH 389 - Ancient Art III: Etruscan and Roman Art (3)
ARTH 390A - Early Christian And Early Byzantine Art: 330-843 (3)
ENGL 307 - Selected Readings in Drama (classical focus) (3)
ENGL 337 - Western Literature: Classical and Medieval (3)
*FLCL 271 - Classical Mythology (3)
FLCL 481 - Special Topics in Classical Literature and Civilization (3)
FLCL 483 - Directed Readings in Classical Languages (1-3)
FLST 381[2] - Special Studies in Language I (3)
FLST 382[2]- Special Studies in Language II (3)
FLTR 271[2] - Literature in Translation (3)
HIST 301 - History of Ancient Greece (3)
HIST 498A - Special Topics in History: Ancient (3)
IDSP 291 - Art and Literature in the Ancient World (3)
PHIL 321 - History of Philosophy: Ancient (3)
PHIL 421 - Plato (3)
PHIL 422 - Aristotle (3)
POLS 350 - Classical and Medieval Political Theory (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Comparative Literature

Coordination: Liberal Arts and Sciences Advising and Counseling Office

The Departments of English and Foreign Languages and Literatures cooperate in offering a minor in comparative literature. This minor is open to students throughout the university. The minor in comparative literature requires the successful completion of 18 semester hours including three required courses and 9 additional hours chosen from selected courses. The three required courses listed below contain perspectives that are essential to the study of comparative literature: a focus on themes, or on genres, or on a time period.

Requirements (18)

ILAS 341 - Thematic Studies in Comparative Literature (3)
ILAS 342 - Genre Studies in Comparative Literature (3)
ILAS 343 - Period Studies in Comparative Literature (3)
At least one of the following (3-6)
ENGL 307 - Selected Readings in Drama (3)
*ENGL 310 - Literary Classics (3)
ENGL 483 - Renaissance Literature (3)
ENGL 489 - European Novel (3)
At least one of the following (3-6)
*FLCL 271 - Classical Mythology (3)
*FLIT 272 - The Italian Renaissance (3)
FLST 481 - Special Topics in Literature I (3)
FLTR 271 - Literature in Translation (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Environmental Management Systems (18)

Coordinators: College of Business: Richard Dowen, William Tallon; College of Engineering and Engineering Technology: Earl Hansen, Murali Krishnamurthi; College of Liberal Arts and Sciences: Philip Carpenter, Paul Culhane, Harvey Smith

Students are strongly encouraged to take the following courses to prepare for the minor.
*BIOS 106 - Environmental Biology (3),
OR *GEOG 253 - Environment and Society (3),
OR *MEE 200 - Energy and the Environment (3)
*CHEM 110 - Chemistry (3),
OR *CHEM 210T - General Chemistry I (3)
*POLS 220 - Introduction to Public Policy (3)

Perspective Study Requirements (12-13)

Students must take four of the following courses with at least one course from each of the three perspective study areas outside their major.

Business Perspective
ACCY 288 - Fundamentals of Accounting (3)
FINA 320 - Principles of Finance (3)
MGMT 301 - Business and Society (3)
MGMT 333 - Principles of Management (3)
MKTG 310 - Principles of Marketing (3)
OMIS 338 - Principles of Operations Management (3)

Engineering Perspective
TECH 265 - Basic Manufacturing Processes (3)
TECH 401 - Ethics in Technology (3)
TECH 434 - Human Factors in Industrial Accident Prevention (3)
TECH 484 - Energy Management (3)

Policy Perspective
ECON 386 - Environmental Economics (3)
GEOG 453 - Environmental Management (3),
OR GEOG 455 - Land-Use Planning (3)
POLS 324 - Politics of Energy and the Environment (3)
POLS 325 - Politics of Regulation (3)

Science Perspective
AHPH 350 - Elements of Environmental Health (3)
BIOS 406 - Conservation Biology (4)
GEOG 303 - Water Resources and the Environment (3)
GEOL 421 - Environmental Geochemistry (3)

Capstone Requirements (6)

IDSP 441 - Environmental Management Systems (3)
IDSP 442 - Proseminar/Internship in Environmental Management Systems (3)

Minor in Environmental Studies

Coordinator: Jie Song, Department of Geography

The environmental studies minor is a multidisciplinary program that allows undergraduates in any degree program to study environmental concepts, issues, and problems from the viewpoints and with the approaches of the natural and social sciences. No more than 9 semester hours may be taken from one department. Credit hours applied to a major may not be applied to this minor.

Requirements (21-22)

Select from the following basic courses (12-13)
*BIOS 106 - Environmental Biology (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
*GEOG 253 - Environment and Society (3)
*GEOL 104 - Introduction to Ocean Science (3),
OR *GEOL 105 - Environmental Geology (3)
POLS 220 - Introduction to Public Policy (3)

* Available for general education credit
[1] May be waived on the basis of high school preparation or placement examination.
[2] May be counted toward the minor when topic is appropriate.

Select from the following natural sciences courses (3-6)
- BIOS 405 - American Ecosystems (1-3)
- BIOS 406 - Conservation Biology (4)
- BIOS 415 - Water Microbiology (3)
- GEOG 302 - Soil Science (4)
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 422 - Plant-Soil Interactions (4)
- GEOG 460 - Remote Sensing of the Environment (3)
- GEOL 421 - Environmental Geochemistry (3)
- GEOL 488 - Environmental Change (3)
- GEOL 490 - Hydrogeology (3)

Select from the following humanities and social sciences courses (3-6)
- COMS 305 - Argumentation and Debate (3)
- COMS 480 - Communication and Conflict Management (3)
- ECON 386 - Environmental Economics (3)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 455 - Land-Use Planning (3)
- *HIST 377 - American Environmental History (3)
- *PHIL 352 - Philosophy of Science (3)
- POLS 322 - Politics and the Life Sciences (3)
- POLS 324 - Politics of Energy and the Environment (3)
- POLS 325 - Politics of Regulation (3)
- SOCI 455 - Environmental Sociology (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in International Studies

Coordinator: Michelle L. Shuey, Department of Geography

The minor in international studies offers students the opportunity to acquire a strong international focus for their program of studies. Such an international focus is important for making students competitive in the increasingly globalized economy and society. The international studies minor is open to students in all disciplines and fields and is appropriate for students planning careers in business, government, foreign service, social science teaching at the secondary level, and law, or graduate study in international studies or a related discipline. It may be especially useful for business, foreign language, and journalism students wishing to supplement their credentials.

Students in the minor select courses from the foundation courses and then choose courses from within one of the several options that provide greater depth through study in either international business studies, international political studies, international development studies, or international arts studies.

Students taking the international studies minor are strongly encouraged to participate in a study-abroad program and to complete the four-semester sequence in a relevant foreign language. Course credit earned through an approved NIU study-abroad program may count toward satisfying the requirements in an option.

Requirements (24)

Foundation Courses (9-12)

Three or four courses from the following

- *ANTH 220 - Introduction to Cultural Anthropology (3)
- ECON 330 - International Economics (3)
- *GEOG 202 - World Regional Geography (3)
- *GEOG 204 - Geography of Economic Activities (3)
- *POLS 260 - Introduction to Comparative Politics (3)

Option (12-15)

Four or five courses from one of the following options

International Business Studies
- ANTH 363 - International Contact in Anthropological Perspective (3)
- COMS 454 - Transnational Communication and Media (3)
- ECON 380 - Comparative Economic Systems (3)
- FINA 470 - International Finance (3)
- HIST 470 - America and Asia (3)
- JOUR 482 - International News Communications (3)
- MGMT 487 - Multinational Management (3)
- MKTG 367 - Principles of Global Marketing (3)
- MKTG 467 - Global Marketing Management (3)
- POLS 383 - Changing World Political Economy (3)

International Politics Studies
- COMS 454 - Transnational Communication and Media (3)
- GEOG 430 - Population Geography (3)
- HIST 343 - History of Southeast Asia Since ca. 1800 (3)
- HIST 382 - Modern Latin America (3)
- HIST 425 - World War II (3)
- HIST 435 - Stalin and Stalinism (3)
- HIST 469 - The Vietnam War (3)
- HIST 482 - Mexico Since 1810 (3)
- HIST 485 - Modern Latin American Revolutions (3)
- *IDSP 219 - Introduction to African Studies (3)
- *ILAS 225 - Southeast Asia: Crossroads of the World (3)
- JOUR 482 - International News Communications (3)
- POLS 285 - Introduction to International Relations (3)
- POLS 362 - Politics of Developing Areas (3)
- POLS 371 - Politics in Southeast Asia (3)
- POLS 376 - Political Violence (3)
- POLS 381 - The U.S. and Latin America (3)
- POLS 383 - Changing World Political Economy (3)
- POLS 469 - Topics in Latin American Politics (3)
- POLS 496 - Independent Study in Political Science (3)
- SOCI 352 - Population (3)
- SOCI 363 - Sociology of the Military (3)

International Development Studies
- ANTH 302 - Asian American Cultures (3)
- ANTH 361 - Cross-Cultural Perspectives on Women (3)
- ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
- ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
- ANTH 468 - Anthropology of Gender (3)
- COMS 454 - Transnational Communication and Media (3)
- ECON 380 - Comparative Economic Systems (3)
- ECON 402 - Comparative Labor Relations (3)
- ECON 443 - Economic Development (3)
- *FCNS 406 - Global Food and Nutrition Issues (3)
- *GEOG 204 - Geography of Economic Activities (3)
- GEOG 430 - Population Geography (3)
- GEOG 451 - Political Geography (3)
- HIST 470 - America and Asia (3)
- ILAS 444 - Comparative Urbanization (3)
- JOUR 482 - International News Communications (3)
- POLS 362 - Politics of Developing Areas (3)
- POLS 383 - Changing World Political Economy (3)
- SOCI 352 - Population (3)

International Arts Studies
- *ARTH 294 - Art History Survey IV: Arts of the East (3)
- *ARTH 378 - Indian and Southeast Asian Art (3)
- ARTH 384 - African Art (3)
- *ARTH 385 - Pre-Columbian Art (3)
- ARTH 387A - Ancient Art I: Egypt (3)
- *ARTH 388B - Ancient Art II: Classical Art (3)
- ARTH 392A - Northern Renaissance Art I (3)
- *ARTH 396 - Italian High Renaissance Art (3)
- ARTH 487 - Southeast Asian Art (3)
- ENGL 335 - Non-Western and Third-World Literature (3)
- MUSC 324 - Introduction to World Music I (3)
- MUSC 325 - Introduction to World Music II (3)
- MUSC 431 - Music of Southeast Asia (3)
- MUSC 432 - Music of China (3)

* Available for general education credit.

Minor in Latino/Latin American Studies

Coordinator: Michael Gonzales, director, Center for Latino and Latin American Studies

The minor in Latino and Latin American studies provides students with detailed knowledge of the Latino experience in the United States as well as Latin American civilization, enriches the general educational experience of students, and offers several practical applications. It prepares future teachers to lecture in Latino and Latin American studies and provides them with knowledge of the cultural heritage of their Latino students. The minor also provides other future professionals with knowledge to maximize their job performance in regions with Latino populations. Latino students enrolled in the minor also acquire a broader understanding of their history and culture.

Requirements (18)

ILAS 100 - Introduction to Latin American Civilization (3),
OR HIST 382 - Modern Latin America (3)
Five of the following (15)
ANTH 405 - Peoples of Mesoamerica (3)
ANTH 414 - Archaeology of Mesoamerica (3)
ANTH 417 - Archaeology of South America (3)
ARTH 376 - Latin American Art (3)
*ARTH 385 - Pre-Columbian Art (3)
ECON 341D - Economic Area Studies: Latin America (3)
ENGL 381 - American Ethnic Literature (3)
FLPO 461 - Brazilian Civilization (3)
FLSP 215 - Spanish Grammar for Spanish Speakers (3)
FLSP 322 - Masterpieces of Spanish-American Literature (3)
FLSP 440 - Spanish American Poetry and Theater (3)
FLSP 441 - Spanish American Novel (3)
FLSP 445 - Latin American Women Writers (3)
FLSP 451 - Literature of the Andean Republics (3)
FLSP 452 - Literature of the Caribbean (3)
FLSP 453 - Literature of Uruguay, Argentina and Chile (3)
FLSP 454 - Mexican Literature (3)
FLSP 455 - Spanish-American Short Story (3)
FLSP 457 - 19th Century Spanish American Literature (3)
FLSP 458 - Spanish American Modernismo and Vanguardias: 1880-1945 (3)
FLSP 459 - Spanish American Historical Novels (3)
FLSP 460 - Contemporary Spanish American Literature (3)
FLSP 461 - Spanish Civilization (3)
FLSP 462 - Spanish-American Civilization (3)
FLSP 487 - Hispanic Dialectology (3)
GEOG 332 - Geography of Latin America (3)
HIST 374 - Latinos in the United States (3)
HIST 381 - Colonial Latin America (3)
HIST 382 - Modern Latin America (3)
HIST 383 - Latin America Through Film (3)
HIST 482 - Mexico Since 1810 (3)
HIST 484 - History of Brazil (3)
HIST 485 - Modern Latin American Revolutions (3)
HIST 486 - Poverty and Progress in Latin America (3)
ILAS 100 - Introduction to Latin American Civilization (3)
ILAS 411 - Latin American Studies: 20th Century Hispanic America (3)
MGMT 487 - Multinational Management (3)
POLS 381 - The U.S. and Latin America (3)
POLS 469 - Topics in Latin American Politics (3)
SOCI 361 - Race and Ethnic Relations (3)
SOCI 454 - Racial and Ethnic Minority Families (3)
SOCI 461 - Intergroup Relations (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Linguistics

Coordinator: Betty J. Birner, Department of English

The participating departments are anthropology, communicative disorders, communication, computer science, English, foreign languages and literatures, philosophy, and psychology.

The interdisciplinary minor in linguistics offers an opportunity to study the nature of human language and theories, methods, and applications of linguistics. It utilizes faculty and course resources in several departments. The minor in linguistics is recommended to students who want recognition for having focused their elective courses on linguistics, particularly to students interested in careers involving problems of language communication and the role of language as it permeates human interactions.

Students in any undergraduate major leading to a baccalaureate degree may choose to complete the requirements of the interdisciplinary linguistics minor. Students who wish to minor in linguistics must have at least sophomore standing and a minimum cumulative GPA of 2.00 and must register with the program coordinator. Those who have satisfied the minor will have this fact noted on their academic transcripts.

The courses listed below survey approaches to the analysis of language and also provide for specialized study in particular areas related to language. Other courses of closely related subject matter may be substituted with the approval of the coordinator.

The student must select courses from at least two departments.

Requirements (18-19)

*ANTH 230 - Anthropology of Language (3),
OR ENGL 318 - Language and Linguistics (3)

Basic Courses (9-15)

COMD 221 - Phonetics and Phonology (3)
COMS 404 - Communication Theories (3)
ENGL 321 - Structure of Modern English (3)
ENGL 322 - Language in American Society (3)
ENGL 433 - Discourse Analysis (3)
Any one of the following non-IndoEuropean language courses may be counted toward the basic course requirement.
COMD 430 - American Sign Language I (3)
FLBU 103 - Beginning Burmese I (5)
FLCH 101 - Beginning Chinese I (3)
FLIN 103 - Beginning Indonesian I (5)
FLJA 101 - Beginning Japanese I (3)
FLTH 103 - Beginning Thai I (5)

Specialized and Related Courses (0-7)

ANTH 331 - Language and Culture (3)
ANTH 435/GEOG 435X - Space in Language and Culture (3)
ANTH 490J - Anthropological Research Training: Linguistic Anthropology (3-6)
COMD 326A - Introduction to Speech Science (3)
COMD 403 - Language Development in Children (3)
CSCI 240 - Computer Programming in C++ (4)
ENGL 320 - History of the English Language (3)
ENGL 432 - Topics in General Linguistics (3)
FLAL 483 - Applied Linguistics and the Romance Languages (3)
FLFR 301 - Advanced French Grammar and Composition (3)
FLFR 481 - French Phonetics and Phonemics (3)
FLGE 301 - Advanced German Grammar and Composition I (3)
FLGE 481 - The Structure of Modern German (3)
FLIS 481 - Independent Study in a Foreign Language (1-6)
FLSP 301 - Advanced Spanish Grammar (3)
FLSP 411 - Advanced Composition in Spanish (3)
FLSP 481 - Spanish Phonology (3)
ILAS 261 - Language, Mind, and Thought (3)
PHIL 205 - Symbolic Logic (3)
PHIL 404 - Philosophy of Language (3)
PSYC 345 - Cognitive Psychology (3)
WOMS 434/ENGL 434X - Women, Men, and Language (3)
Any one continuation course of the beginning non-IndoEuropean language courses listed under basic courses or any 200-level non-IndoEuropean language course.

Six or more semester hours in the minor must be taken at NIU.

* Available for general education credit.

Minor in Public Administration

Coordination: Liberal Arts and Sciences Advising and Counseling Office and the Division of Public Administration, Department of Political Science

The interdisciplinary minor in public administration is designed to allow liberal arts students, primarily in the humanities and the social sciences, to develop a knowledge and an appreciation of basic issues and concepts in public administration. The student is introduced to a basic understanding of contemporary problems encountered in the administration of public agencies. The minor is not intended to provide vocational or professional competency.

Requirements (24-25)

COMS 361 - Business and Professional Communication (3),
OR ENGL 300 - Advanced Essay Composition (3)
*POLS 100 - American Government and Politics (3)
POLS 331 - Public Administration (3)
*SOCI 170 - Introduction to Sociology (3)
SOCI 375 - Organizations in Modern Society (3)
One of the following (Students who satisfy this requirement in the process of meeting other major or minor requirements should select an additional course from the list below this one.) (3-4)
- CSCI 250 - Computer Programming in Cobol (4)
- *STAT 208 - Basic Statistics (3)
- STAT 301 - Elementary Statistics (4)
- STAT 350 - Introduction to Probability and Statistics (3)

Two of the following chosen in consultation with an adviser (6)
- ECON 320 - Government and Business (3)
- PHIL 337 - Business Ethics (3)
- POLS 330 - Bureaucracy and the Public Policy Process (3)
- PSYC 472 - Group Processes (3)
- SOCI 359 - Industrial Sociology (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Southeast Asian Studies

Coordinator: Susan D. Russell, director, Center for Southeast Asian Studies

The primary functions of the center are the coordination of undergraduate and graduate Southeast Asia courses offered by various departments; development of specialized library and research facilities; facilitation of research by graduate students and faculty; promotion of exchange programs with universities in Southeast Asia; administration of operational programs concerned with Southeast Asia; sponsorship of a publication series on Southeast Asia; and promotion of outreach activities dealing with Southeast Asia.

The participating academic areas are anthropology, art history, foreign languages and literatures, geography, history, music, political science, and sociology.

Knowledge of Southeast Asia is useful for students who anticipate careers in government (particularly the foreign service), in secondary school teaching, and in international business or academic institutions which offer programs dealing directly or peripherally with Southeast Asia.

Any student completing the requirements for a baccalaureate degree may elect to complete the requirements for an interdisciplinary minor focusing on Southeast Asia, as listed below. Students electing this interdisciplinary minor should declare the minor at the Center for Southeast Asian Studies.

Requirements (19 or 21)

Students must include 10 semester hours of an intensively taught Southeast Asian language[1] (Burmese, Indonesian, Tagalog, or Thai) or 12 semester hours of Chinese language. An additional 9 semester hours, from at least two departments, of Southeast Asian language or nonlanguage credit must be selected from the following list of courses.

ANTH 302 - Asian American Cultures (3)
ANTH 304 - Muslim Cultures in Anthropological Perspective (3)
ANTH 310 - The Archaeology of Oceania and Southeast Asia (3)
ANTH 363[2] - International Contact in Anthropological Perspective (3)
ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
ANTH 422 - Gender in Southeast Asia (3)
ANTH 428[2] - Ritual and Myth (3)
ANTH 462 - Museum Methods (3)
ANTH 491[2] - Current Topics in Anthropology (3)
ANTH 493[2] - Anthropology Field Study (1-6)
ANTH 498[2] - Independent Study in Anthropology (1-6)
*ARTH 378 - Indian and Southeast Asian Art (3)
ARTH 487 - Southeast Asian Art (3)
ENGL 400[2] - Literary Topics (3)
FLBU 103, FLBU 104 - Beginning Burmese I and II (5, 5)
FLBU 203, FLBU 204 - Intermediate Burmese I and II (5, 5)
FLCH 101, FLCH 102 - Beginning Chinese I and II (3, 3)
FLCH 201, FLCH 202 - Intermediate Chinese I and II (3, 3)
FLIN 103, FLIN 104 - Beginning Indonesian (5, 5)
FLIN 203, FLIN 204 - Intermediate Indonesian (5, 5)
FLIN 421 - Introduction to Indonesian Literature (3)
FLIS 481 - Independent Study in a Foreign Language (1-3)
FLST 381, FLST 382[2] - Special Studies in Language I and II (3, 3)
FLST 481, FLST 482[2] - Special Topics in Literature I and II (3, 3)
FLST 483 - Special Topics in Linguistics (3)
FLTA 103, FLTA 104 - Beginning Tagalog I and II (5, 5)
FLTA 203, FLTA 204 - Intermediate Tagalog I and II (3, 3)
FLTH 103, FLTH 104 - Beginning Thai (5, 5)
FLTH 203, FLTH 204 - Intermediate Thai (5, 5)
GEOG 338 - Geography of Asia (3)
GEOG 390[2] - Topics in Geography (1 to 3)
GEOG 491[2] - Undergraduate Research in Geography (1-3)
GEOG 498B[2] - Seminar in Current Problems: Meteorology/Climatology (1-3)
HIST 319 - The Early Islamic World (3)
HIST 342 - History of Southeast Asia to ca. 1800 (3)
HIST 343 - History of Southeast Asia Since ca. 1800 (3)
HIST 346 - Women in Asian History (3)
HIST 446 - History of Thailand (3)
HIST 447 - History of Burma (3)
HIST 448 - History of Indonesia (3)
HIST 449 - History of Malaysia and Singapore (3)
HIST 469 - The Vietnam War (3)
HIST 470 - America and Asia (3)
HIST 475 - The United States and Southeast Asia and the Indian Subcontinent (3)
HIST 493H[2] - Honors (1-3)
*ILAS 225 - Southeast Asia: Crossroads of the World (3)
ILAS 490[2] - Advanced Topics in Interdisciplinary Studies (3)
JOUR 482[2] - International News Communications (3)
MUSC 398A - World Music Ensemble: Gamelan (1)
MUSC 431 - Music of Southeast Asia (3)
POLS 362 - Politics of Developing Areas (3)
POLS 371 - Politics in Southeast Asia (3)
POLS 374 - Minorities in Politics (3)
POLS 495[2] - Seminar in Current Problems (3)
POLS 496[2] - Independent Study in Political Science (1-6)
SOCI 457 - Families in Global Perspective (3)

Six or more semester hours in the minor must be taken at NIU.

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* Available for general education credit.
[1] Demonstrated competence in an approved Southeast Asian language may be substituted for the required language courses, decided on a case-by-case basis by the director of the Center for Southeast Asian Studies and the student's primary adviser.
[2] May be counted toward the minor when topic is appropriate.

Minor in Urban Studies

Coordination: Liberal Arts and Sciences Advising and Counseling Office

The participating departments are anthropology, economics, geography, history, political science, and sociology.

The interdisciplinary minor in urban studies offers students an opportunity to study urban problems more comprehensively than possible within a single discipline. The courses listed below survey the approaches and tools of different disciplines to an array of urban problems and issues, as well as probing in depth particular urban topics.

The minor is recommended to those students interested in entering urban-oriented fields of study or careers. These include such fields as public administration, planning, social services, journalism, and marketing. Students who wish to participate in the urban studies minor should register with the Liberal Arts and Sciences Advising and Counseling Office.

Requirements (21)

ECON 385 - Introduction to Urban and Regional Economics (3)
GEOG 362 - Geography of Urban Systems (3)
POLS 303 - Local Government and Politics (3)
SOCI 351 - The Urban Community (3)
Three courses chosen from at least two departments outside of the major department (9)
- ECON 454 - State and Local Finance (3)
- ECON 485 - Urban Economic Problems and Policies (3)
- GEOG 463 - Urban Geography (3)
- HIST 368 - The History of Chicago (3)
- ILAS 444 - Comparative Urbanization (3)
- POLS 302 - Government in Metropolitan Areas (3)
- POLS 326 - Government and Welfare (3)
- POLS 331 - Public Administration (3)
- POLS 439 - Internship in Administration (3)
- SOCI 352 - Population (3)
- SOCI 359 - Industrial Sociology (3)
- SOCI 361 - Race and Ethnic Relations (3)
- SOCI 459 - Political Sociology (3)
- SOCI 461 - Intergroup Relations (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Women's Studies

Coordinator: Amy K. Levin, director, Women's Studies Program

The minor in women's studies is recommended for all students interested in examining historical and contemporary roles, perceptions, and contributions of women and in exploring other gender-related issues. Such exploration should broaden students' understanding of current societal expectations for both women and men, thereby increasing their effectiveness and sensitivity in a variety of interpersonal and professional settings. The minor is particularly appropriate for students preparing for advanced study in a variety of disciplines or careers in business, communications, education, health, humanities, and human services.

Elective courses for the minor are chosen to complement the student's background, interests, and career plans and, in some instances, also help satisfy distributive studies area requirements in the general education program. Faculty members from a wide variety of departments participate in the core and special topics courses of the minor. Students interested in declaring this interdisciplinary minor should contact the Women's Studies Program, Reavis Hall 103, early in their college careers for information and advisement.

Students may enroll in a variety of internships combining their professional interests with their preparation in women's studies. Past interns have worked with the Cook County victim's assistance program, the local shelter for battered women, the Governor's Commission on the Status of Women, a medical school research grant on women's wellness, a high school girls' leadership project, and other organizations' activities.

Students must complete 18 semester hours for this minor and are urged to complete *WOMS 230, *WOMS 235, and WOMS 432 as early as possible.

Independent study and topics courses in a variety of departments may meet the minor requirements, with the approval of the director of the women's studies program, when substantial treatment of women's studies is included in the course.

Requirements (18)

*WOMS 230 - Women in Contemporary America (3)
*WOMS 235 - Women Across Cultures and Centuries (3)
WOMS 432 - Feminist Theory (3)
Three of the following (9)
- AHPH 306 - Human Sexuality (3)
- AHPH 411 - Sexuality Education (3)
- ANTH 361 - Cross-Cultural Perspectives on Women (3)
- ANTH 468 - Anthropology of Gender (3)
- ARTH 485D - Topics in Art History: Images of Women (3)
- BIOS 493[2] - Topics in Biology (1 to 3)
- *COMS 410 - Communication and Gender (3)
- ENGL 298[2] - Topics in Literature (3),
  - OR ENGL 381[2] - American Ethnic Literature (3),
  - OR ENGL 399H[2] - Topics in American Literature: Honors (3),
  - OR ENGL 400[2] - Literary Topics (3),
  - OR ENGL 499H[2] - Topics in English Literature: Honors (3)
- ENGL 382 - Women Writers: The Tradition in English (3)
- ENGL 383 - Gay and Lesbian Literature (3)
- *FCNS 406 - Global Food and Nutrition Issues (3)
- FCNS 464 - Social Psychology of Dress and Appearance (3)
- FLFR 445 - French Women Writers (3)
- FLSP 445 - Latin American Women Writers (3)
- FLST 481[2] - Special Topics in Literature I (3)
- HIST 322 - Women in Modern Europe (3)
- HIST 346 - Women in Asian History (3)
- HIST 353 - Women in African History (3)
- HIST 360 - Race, Class, and Gender in American History (3)
- HIST 369 - Women in United States History (3)
- HIST 402 - Gender and Sexuality in History (3)
- HIST 413 - Family, Sexuality, and Society Since 1400 (3)
- HIST 473 - Topics in Women's History (3)
- IDSP 402 - The Africana Woman (3)
- ILAS 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
- MGMT 498 - Equal Opportunity and Employment (3)
- NURS 380 - Nursing Care of Women (3)
- PHIL 365 - Feminism and Philosophy (3)
- POLS 373 - Women and Politics (3)
- PSYC 424 - Adolescent Development (3)
- SOCI 354 - Families and Social Change (3)
- SOCI 357 - The Sociology of Gender (3)
- SOCI 385 - Gender and Crime (3)
- SOCI 454 - Racial and Ethnic Minority Families (3)
- WOMS 324 - Women in Science (3)
- WOMS 332 - Growing Up Female (3)
- WOMS 390 - Internship in Women's Studies (3)
- WOMS 430 - Special Topics in Women's Studies (3)
- WOMS 434 - Women, Men, and Language (3)
- WOMS 439 - Independent Study in Women's Studies (3)

Six or more semester hours in the minor must be taken at NIU.

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* Available for general education credit.
[2] May be counted toward the minor when topic is appropriate.

Interdisciplinary Concentration

Concentration in Medieval Studies

Coordinators: Nicole Clifton and Susan Deskis (Department of English) and Valerie Garver (Department of History)

The medieval studies concentration offers undergraduates a course of study in medieval culture and civilization. Students in any baccalaureate degree program who have at least sophomore standing and a GPA of 2.00 or better can complete the requirements for a concentration in medieval studies by selecting their general education and elective courses from those listed below. Students in medieval studies must register with one of the coordinators of medieval studies for approval of the program of study.

Requirements (21)

*IDSP 225 - Introduction to Medieval Society and Culture (3)
IDSP 425 - Seminar in Medieval Studies (3)
  This course should be taken after all or most other course requirements have been completed.
Five of the following from at least three departments (15)
  ARTH 390A - Early Christian And Early Byzantine Art: 330-843 (3)
  ARTH 390B - Middle and Late Byzantine Art: ca. 843-1453 (3)
  ARTH 391A - Early Medieval Art: ca. 500-1000 (3)
  ARTH 391B - Romanesque and Gothic Art (3)
  ARTH 392A - Northern Renaissance Art I (3)
  ARTH 393 - Italian Early Renaissance Art (3)
  ARTH 497 - History of Architecture I: to 1400 (3)
  ENGL 320 - History of the English Language (3)
  ENGL 337 - Western Literature: Classical and Medieval (3)
  ENGL 340 - The Bible as Literature (3)
  ENGL 405 - Early English Literature (3)
  ENGL 406 - Chaucer (3)
  ENGL 420 - Arthurian Literature (3)
  FLCL 101, FLCL 102 - Elementary Latin I and II (3, 3)
  FLCL 201 - Intermediate Latin I (3)
  *FLCL 271 - Classical Mythology (3)
  FLFR 441 - Medieval French Literature (3)
  FLFR 482 - History of the French Language (3)
  FLGE 485 - History of the German Language (3)
  FLSP 432 - Medieval Spanish Literature (3)
  FLSP 491 - History of the Spanish Language (3)
  HIST 110 - Western Civilization to 1500 (3)
  HIST 305 - Europe in the Early Middle Ages (3)
  HIST 306 - Europe in the Later Middle Ages (3)
  HIST 319 - The Early Islamic World (3)
  *HIST 323 - History of Science to Newton (3)
  HIST 336 - Medieval Russia: Origins to 1682 (3)
  HIST 408 - Medieval Everyday Life (3)
  HIST 420 - The Renaissance (3)
  HIST 498B - Special Topics in History: Medieval (3)
  MATH 304 - History of Mathematics Through the 17th Century (3)
  MUSC 321 - History and Literature of Music I (3)
  PHIL 321 - History of Philosophy: Ancient (3)
  PHIL 422 - Aristotle (3)
  PHIL 423 - Medieval Philosophy (3)
  POLS 350 - Classical and Medieval Political Theory (3)
  THEA 370 - History of Theatre and Drama I (3)

Certificates of Undergraduate Study

Asian American Studies (12)

Coordination: Liberal Arts and Sciences Advising and Counseling Office

This certificate is designed to provide interested students with a strong sense of the Asian American experience and its impact on individuals, their communities, and this nation.

The certificate of undergraduate study is open to all students admitted to NIU. Students must maintain good academic standing within the university, achieve a minimum of C in each course applied toward the certificate, and complete all certificate work within a period of six calendar years. Some courses may have prerequisites that are not part of the certificate curriculum. Students are strongly encouraged to take HIST 378T, Asian American History, early in the certificate curriculum. Students pursuing the certificate should meet with the coordinator for this certificate of undergraduate study early in their program of study.

Requirements

HIST 378T - Asian-American History (3)
Two of the following (6)
  ANTH 302 - Asian American Cultures (3)
  FCNS 384 - Asian American Families (3)
  HIST 470 - America and Asia (3)
One of the following (3)
  ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
  ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
  ANTH 422 - Gender in Southeast Asia (3)
  ARTH 294 - Art History Survey IV: Arts of the East (3)
  ARTH 378 - Indian and Southeast Asian Art (3)
  ARTH 487 - Southeast Asian Art (3)
  ENGL 335[1] - Non-Western and Third-World Literature (3)
  ENGL 381[1] - American Ethnic Literature (3)
  GEOG 338 - Geography of Asia (3)
  HIST 346 - Women in Asian History (3)
  ILAS 225 - Southeast Asia: Crossroads of the World (3)
  POLS 371 - Politics in Southeast Asia (3)
  POLS 372 - Politics of China, Japan, and Korea (3)
  A course in Asian music, with approval of the coordinator (3)
  An independent study course on an Asian or Asian American topic, with approval of coordinator (3)

Lesbian, Gay, Bisexual, and Transgender Studies (12)

Coordinators: Bradley Peters (Department of English) and Diana Swanson (Women's Studies Program and Department of English)

This certificate is designed for students interested in examining issues of gender and sexual orientation in order to function as informed citizens and successful professionals in the 21st century. Such exploration should broaden students' understanding of societal expectations about and the historical and contemporary contributions of sexual minorities, thereby increasing their effectiveness and sensitivity in a variety of interpersonal and professional settings. The certificate is particularly appropriate for students preparing for or currently working in a variety of disciplines or careers in business, communications, the arts, education, health, humanities, social sciences, and human services.

To pursue the certificate, students must be admitted to the university but need not be enrolled in a degree program. Students must consult with the coordinator of lesbian, gay, bisexual, and transgender studies for approval of the course of study.

All requirements for the certificate must be completed within a period of six consecutive years. In addition to the approved elective courses listed below, any undergraduate-level special topics course or independent or directed study course focused on sexual orientation and/or gender identity may be counted toward the certificate with the approval of the coordinator of lesbian, gay, bisexual, and transgender studies.

Requirements

ILAS 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
Three of the following (9)
  AHPH 306 - Human Sexuality (3)
  AHPH 411 - Sexuality Education (3)

* Available for general education credit.
[1] When a substantial part of the course is devoted to Asian or Asian American topics, with approval of the coordinator.
[2] May be counted toward the minor when topic is appropriate.

ANTH 468 - Anthropology of Gender (3)
COMS 230 - Rhetoric and the Media (3)
COMS 410 - Communication and Gender (3)
ENGL 383 - Gay and Lesbian Literature (3)
ENGL 400[2] - Literary Topics (3)
HIST 402 - Gender and Sexuality in History (3)
ILAS 351 - Research in Lesbian, Gay, Bisexual, Transgender Studies (3)
ILAS 390[2] - Internship (3)
PSYC 474 - Psychological Basis of Sexuality (3)
WOMS 230 - Women in Contemporary America (3)
WOMS 235 - Women Across Cultures and Centuries (3)
WOMS 430[2] - Special Topics in Women's Studies (3)
WOMS 432 - Feminist Theory (3)

Course Selection

In addition to completing a college major, many students find it beneficial in their future careers and other lifetime activities to have completed a program of study which broadens their knowledge and experience in a cohesive way. This objective can be achieved by a careful and informed choice of general education and elective courses.

For example, by carefully selecting the courses taken to fulfill the requirements of the General Education Program, students can discover their interests and abilities and thereby identify appropriate educational goals or, if these goals have already been decided, seriously test their suitability. In addition, an informed selection of courses taken to fulfill the requirements of the General Education Program can develop into a minor or even a second major area of study.

Students majoring in a degree program in the College of Liberal Arts and Sciences may have as many as 42 hours of elective courses, depending on their particular majors. The choice of courses taken to fill these elective hours is among the most important decisions a student will make while at NIU.

Students are strongly encouraged to use these hours to complete a minor area of study. Students with a major in the College of Liberal Arts and Sciences should use the offerings of the college as well as those of other colleges in the university in designing suitable programs of study–ones that will reinforce their intellectual and professional goals.

The college's Advising and Counseling Office is available to students in need of advice and assistance.

Pre-professional Studies

Professional schools such as those offering degrees in dentistry, law, and medicine usually require specific courses and/or an undergraduate degree from an accredited college or university for admission to their professional programs. Students interested in applying for admission into such programs are advised by the Advising and Counseling Office of the college and should register their interest in such programs with this office at the earliest possible date.

Admission to professional schools generally is highly competitive, with the number of qualified applicants far exceeding the number of students that can be admitted. A great deal of information is required by the admissions committees. Many professional schools require applicants to take special standardized tests, such as the Law School Admission Test (LSAT), the Medical College Admission Test (MCAT), and the Dental Aptitude Test (DAT), to measure the performance of applicants against national standards. Some professional schools use national application services (e.g., the Law School Data Assembly Service) to standardize the materials they are reviewing. Therefore, the application process is complex and time-consuming. To assist applicants, the Advising and Counseling Office has available detailed guidelines for completing each type of professional school application.

The Advising and Counseling Office also operates a recommendation service for applicants to professional schools. Applicants who use this service receive recommendation forms to be submitted to faculty members and others who can speak of their qualifications for professional study. These recommendations are submitted to the Advising and Counseling Office. They are sent to professional schools at the student's request. Students are encouraged to request these recommendations early, so that their performance will still be fresh in the minds of the persons writing the recommendations. Students may begin collecting recommendations as early as they deem appropriate, regardless of when they begin to apply to professional schools.

A pre-professional association for students interested in medically related fields has been active on campus for several years. This association sponsors a variety of informational programs throughout the year for tentative and declared pre-professional students in medically related areas. A similar group has been organized for pre-law students. Information about both of these organizations is available in the Advising and Counseling Office.

Degree Possibilities for Students Gaining Early Admission to a Professional School

An NIU student who transfers to an accredited school of dentistry, law, medicine, optometry, podiatry, or veterinary medicine may receive a baccalaureate degree from Northern Illinois University on the basis of course work completed successfully at the professional school in one of two ways.

The degree Bachelor of General Studies (B.G.S.) will be awarded to any student who presents evidence of successful completion of one year of full-time study, i.e., the equivalent of 30 semester hours, at an accredited professional school of one of the types listed above, provided that the student fulfilled the following requirements prior to transferring to the professional school.

The university's general education requirements.
At least 30 semester hours of NIU course credit during junior and senior years.
At least 90 semester hours of college credit applicable to a degree program.

Students who have been admitted to professional schools of the types mentioned above and who are enrolled on a part-time basis may be eligible for this degree under the same conditions upon completion of 30 semester hours (or the equivalent) in course work at the professional school. Students otherwise eligible for this degree under the above policy who have not met one or more of the four requirements listed or who may be enrolled in the professional school on a part-time basis may earn the B.G.S. degree by completing the remaining requirements after enrollment in the professional school but prior to earning the professional degree.

A baccalaureate degree other than the B.G.S. may be earned by an NIU student who transfers to the type of professional school listed above if the student's major department determines that course work taken at the professional school may be substituted for any unfulfilled graduation requirements in the major and if the student has met all other graduation requirements.

A student who wishes to earn the B.G.S. degree as outlined above should file a change of major request with the assistant dean of the College of Liberal Arts and Sciences one semester prior to

* Available for general education credit.
[2] May be counted toward the minor when topic is appropriate.

fulfilling all requirements. A student who wishes to earn the B.A. or B.S. degree on the basis of professional school work should contact the chair of the major department at the earliest possible date to establish in writing the professional school courses which will be permitted to meet the major requirements. The Office of Registration and Records should also be notified of a student's intent to complete degree requirements in this way and be provided with a list of the professional school courses designated by the major department as fulfilling major requirements.

Pre-professional Advisement

The Advising and Counseling Office, in cooperation with selected faculty members within the college, is responsible for the advisement of students interested in pre-dentistry, pre-engineering, pre-law, pre-medicine, pre-optometry, pre-pharmacy, pre-podiatry, and pre-veterinary medicine. Students interested in the health science programs listed above should also consult with the designated pre-professional adviser in the Department of Biological Sciences. The Advising and Counseling Office of the College of Liberal Arts and Sciences maintains a library of catalogs from professional schools, and other written information about professional schools and about the professions themselves, and assists applicants throughout the application process.

Course Selection for Pre-professional Students

The following lists indicate the pre-professional courses commonly recommended as *minimum* requirements by professional schools. Specific requirements do vary from school to school, however, so students should check the catalogs of the schools to which they wish to apply as they plan their programs of study with their advisers. In general, it is valuable for students seeking admission to any of the health science professions to include a chemistry course on their schedules as first-semester freshmen. It is particularly important for each pre-professional student to consult with a pre-professional adviser early in her or his first semester of enrollment at NIU to plan the course sequences, semester loads, and course selection to match the individual student's background and goals.

Pre-dentistry

In some instances, students enter dental schools after three years of college-level study. However, the majority of dental students today have received a baccalaureate degree prior to entrance.

Biology–1-1/2 years, with laboratory (BIOS 205T/BIOS 207, BIOS 208T/BIOS 210, and BIOS 209T/BIOS 211)

Chemistry–2 years, general and organic (CHEM 210T/CHEM 212, CHEM 330, CHEM 331, CHEM 332, and CHEM 211T/CHEM 213)

Physics–1 year, with laboratory (PHYS 210 and PHYS 211, or PHYS 253 and PHYS 273)

English–1 year (ENGL 103 and ENGL 104, or ENGL 105)

Recommended: Additional courses in biology, chemistry, mathematics, and psychology such as (BIOS 313, BIOS 355, CHEM 470, MATH 155, MATH 229, PSYC 102, PSYC 225, STAT 301)

Appropriate electives in humanities and social sciences selected in consultation with adviser

Pre-engineering

Students who pursue this course of study will be able to transfer approximately two years of work to an engineering school. The amount of credit that can be transferred depends upon the branch of engineering for which they are preparing, the schools to which they will transfer and their high school backgrounds, particularly in mathematics. It is recommended that students interested in engineering take four years of high school mathematics, including trigonometry, so that they may enroll in MATH 229 and PHYS 253 during their first semester.

Students wishing to participate in this course of study should consult with the college's Advising and Counseling Office or the Department of Physics for advisement and also consult the catalog of the prospective engineering school for special requirements.

CHEM 210T - General Chemistry I, and CHEM 212 - General Chemistry Laboratory I
CHEM 211T - General Chemistry II, and CHEM 213 - General Chemistry Laboratory II
CSCI 230 - Computer Programming in Fortran
ENGL 103 - Rhetoric and Composition I
ENGL 104 - Rhetoric and Composition II
MATH 229 - Calculus I
MATH 230 - Calculus II
MATH 232 - Calculus III, and either MATH 334 - Foundations of Applied Mathematics, OR MATH 336 - Ordinary Differential Equations
PHYS 253 - Fundamentals of Physics I: Mechanics
PHYS 273 - Fundamentals of Physics II: Electromagnetism
PHYS 300 - Analytical Mechanics I (not required for all engineering programs; consult with physics department adviser)
Appropriate electives selected in consultation with adviser to bring total to 64 semester hours

Pre-law

Law schools do not usually recommend specific courses of study. They are primarily concerned with a well developed major and the study of the basic tools of the law: logic, the ability to speak with clarity and force and the ability to write. The courses listed below are suggestions selected with the development of an appreciation of the nature of the law and legal study in mind. Many of these courses may also assist the student in refining the basic skills just mentioned. Students should feel free to incorporate in their programs of study as many or as few of these as they desire.

ACCY 206 - Introductory Financial Accounting, and ACCY 207 - Introductory Cost Management, OR ACCY 288 - Fundamentals of Accounting
COMS 304 - Introduction to Persuasion Theory, OR COMS 305 - Argumentation and Debate
ECON 260 - Principles of Microeconomics
ECON 261 - Principles of Macroeconomics
ENGL 300 - Advanced Essay Composition (special sections designated for pre-law)
HIST 478 - American Legal History to 1865
HIST 479 - American Legal History Since 1865
MGMT 217 - Legal Environment of Business
MGMT 438 - Human Resource Planning and Staffing
PHIL 105 - Critical Reasoning
PHIL 231 - Contemporary Moral Issues
PHIL 362 - Philosophy of Law
POLS 410 - Constitutional Law I
POLS 411 - Constitutional Law II
POLS 412 - Constitutional Law III
POLS 450 - American Political Thought I

Pre-medicine and Pre-osteopathy

Except in rare instances, medical schools require students to have a baccalaureate degree prior to entrance to medical school.

Biology– 2 years, with laboratory (BIOS 205T/BIOS 207, BIOS 208T/BIOS 210, and BIOS 209T/BIOS 211, and BIOS 355)

Chemistry–2 years, general and organic (CHEM 210T/CHEM 212, CHEM 330, CHEM 331, CHEM 332, and CHEM 211T/CHEM 213)

Physics–1 year, with laboratory (PHYS 210 and PHYS 211, or PHYS 253 and PHYS 273)

English–1 year (ENGL 103 and ENGL 104, or ENGL 105

Mathematics–1 semester (MATH 155 OR MATH 229)

Recommended: Additional courses in biology, chemistry, and mathematics such as (BIOS 308, BIOS 313, CHEM 470, STAT 301)

Appropriate electivs in humanities and social sciences selected in consultation with adviser.

Pre-optometry

Students preparing to study in this field may be admitted to professional schools after 60 semester hours of college work, but most will have completed three or four years prior to entrance.

Biology– 1 1/2 years, with laboratory (BIOS 205T/BIOS 207, BIOS 208T/BIOS 210, and BIOS 209T/BIOS 211)

Chemistry–2 years, general and organic chemistry (CHEM 210T/ CHEM 212, CHEM 211T/ CHEM 213, CHEM 330, CHEM 331, CHEM 332)

English–1 year (ENGL 103 and ENGL 104, or ENGL 105)

Physics–1 year, with laboratory (PHYS 210 and PHYS 211, or PHYS 253 and PHYS 273)

Mathematics–1 year (including STAT 301)

Psychology–1 year (PSYC 102 plus one additional course such as PSYC 225)

Appropriate electives selected in consultation with adviser

Pre-pharmacy

The basic pharmacy B.S. degree requires five years of full-time study. Some programs combine one year of pre-pharmacy education with four years in pharmacy school; others combine two years of pre-pharmacy study with three years in pharmacy school. Many pharmacy schools now offer the Doctor of Pharmacy degree either as 5 + 2 (B.S. in pharmacy followed by two additional years in pharmacy school), or as a 2 + 4 sequence (two years of pre-pharmacy followed by four years in the Pharm. D. program). Because of the wide variety of pharmacy programs and the narrow latitude for electives in pre-pharmacy programs, it is essential that course selection be made carefully and in consultation with an adviser.

One-Year Program

Biology–1 year, with laboratory (BIOS 205T/BIOS 207)

Chemistry–1 year, with laboratory (CHEM 210T/CHEM 212 and CHEM 211T/CHEM 213)

Mathematics–1 semester (MATH 155 or MATH 229)

English–1 year (ENGL 103 and ENGL 104, ENGL 105)

Appropriate electives selected in consultation with adviser to bring total to 30 semester hours.

Additional Courses for Two-Year Programs

Biology–1 year (BIOS 209T/BIOS 211; BIOS 357 OR BIOS 355 and BIOS 358)

Chemistry–1 year, organic with laboratory (CHEM 330, CHEM 331, CHEM 332)

Mathematics–1 semester (MATH 229)

Physics–1 year (PHYS 210 and PHYS 211 or PHYS 253 and PHYS 273)

Economics–1 semester to 1 year (ECON 260 and ECON 261)

Appropriate electives in social sciences and humanities selected in consultation with adviser to bring total to 60 semester hours.

Pre-podiatry

Students preparing to study in this field may be admitted to professional schools after 60 semester hours of college work, but most will have completed three or four years prior to entrance.

Biology–1-1/2 years, with laboratory (BIOS 205T/BIOS 207, BIOS 208T/BIOS 210 and BIOS 209T/BIOS 211)

Chemistry–2 years, general and organic (CHEM 210T/CHEM 212, CHEM 211T/CHEM 213, CHEM 330, CHEM 331, CHEM 332)

Physics–1 year, with laboratory (PHYS 210 and PHYS 211, or PHYS 253 and PHYS 273)

English–1 year (ENGL 103 and ENGL 104, or ENGL 105)

Mathematics–1 year (including STAT 301)

Pre-veterinary Medicine

Students preparing to study in this field may be admitted to professional schools after 60 semester hours of college work, but most will have completed three or four years prior to entrance.

Biology–2-1/2 years, including zoology and genetics (BIOS 205T/BIOS 207, BIOS 208T/BIOS 210, and BIOS 209T/BIOS 211, BIOS 308,and BIOS 355)

Chemistry–2 years, general and organic chemistry (CHEM 210T/ CHEM 212, CHEM 211T/ CHEM 213, CHEM 330, CHEM 331, CHEM 332)

English–1 year (ENGL 103 and ENGL 104, or ENGL 105)

Physics–1 year, including laboratory (PHYS 210 and PHYS 211, or PHYS 253 and PHYS 273)

Animal Science–1 semester (not offered at NIU; usually taken at a community college or at a veterinary medicine school immediately prior to entrance.) Prospective veterinarians should acquire essential experience by assisting a practicing veterinarian prior to applying for admission to a school of veterinary medicine

Recommended: Additional courses in chemistry and mathematics such as CHEM 470, MATH 229, STAT 301

Appropriate electives selected in consultation with adviser

Combined Degree Program in Physics and Engineering

A combined program–beginning with courses at NIU and with final course work at the University of Illinois (Urbana-Champaign or Chicago)–leading to baccalaureate degrees in physics and engineering, is available to interested students. During the years at NIU the student will be expected to complete most of the general education requirements and the usual first three years of a physics major. Any remaining NIU requirements and the courses necessary for the B.S. degree in the student's chosen engineering field must be completed at the University of Illinois. A student will have advisers at both institutions to aid in planning the program of study. The student becomes eligible for degrees in both physics and engineering when the entire program is completed.

This program provides students an excellent opportunity to increase the breadth of their education while allowing them to develop a specialty. Students wishing to participate in this program are required to enroll at NIU as physics majors and should consult with the college's Advising and Counseling Office or the Department of Physics for advisement.

Admission to the University of Illinois School of Engineering is *not* automatic upon completion of the first three years at NIU. The applicant must meet the same standards as any other student transferring into the School of Engineering. A student majoring in physics may also seek a degree in a chosen field of engineering from the College of Engineering and Engineering Technology at Northern Illinois University either as a second major or as a second baccalaureate degree. A student interested in either of these alternatives should see the catalog sections on second major and second baccalaureate degree and consult with both the Department of Physics and the appropriate NIU engineering department for advisement.

External Education

The College of Liberal Arts and Sciences, through ILAS 250, External Education, awards from 3 to 30 semester hours of college credit to individuals who have successfully completed training or inservice programs offered by off-campus agencies. Students interested in applying for credit on the basis of an approved off-campus program should contact the Liberal Arts and Sciences office.

Program outlines and supporting documents from the offering agency must be submitted to the College of Liberal Arts and Sciences. The curriculum committee of Liberal Arts and Sciences, in consultation with appropriate departments and the university's Undergraduate Coordinating Council, will decide on the amount of credit extended.

Foreign Language Residence Program

The College of Liberal Arts and Sciences and the Department of Foreign Languages and Literatures participates in the conduct of a foreign language residence program, which provides NIU students interested in French, German, Russian, or Spanish with the opportunity to live together for an academic year in contact with native speakers and to engage in various educational, cultural, and social activities related to the foreign country in which they are interested. The Foreign Language Residence Program is part of the Housing and Dining special interest option and is currently conducted in Douglas Residence Hall. For further information, contact the program's coordinator.

Interdisciplianry Courses Offered by the College of Liberal Arts and Sciences

Inter-Liberal Arts and Sciences (ILAS)

ILAS 100. INTRODUCTION TO LATIN AMERICAN CIVILIZATION (3). Introduction to Latin American civilization with consideration of anthropology, archaeology, art, history, literature, music, politics, international relations, and linkages with Latinos in the United States.

ILAS 101. PRECEPTORIAL (1). Designed to provide new students with an understanding of the ways in which the three divisions of the College of Liberal Arts and Sciences (humanities, social sciences, and sciences) address questions of personal identity and the value of the collegiate experience.

ILAS 123. CULTURAL PLURALISM IN THE UNITED STATES (3). Introduction to the multicultural background of American civilization which assists students in gaining a greater understanding of the cultural differences within a plural society. Analysis of the adaptation experiences of cultural groups in the United States and examination of their goals, aspirations, problems, and achievements.

ILAS 201. INTRODUCTORY CLINICAL EXPERIENCE (1). Discipline-related early clinical experiences for prospective middle/junior and senior high school teachers. Designed to provide an overview of teaching as a profession and of contemporary problems in public schools. Includes a minimum of 20 clock hours of supervised and formally evaluated participation in a variety of discipline settings, and formal sessions on topics such as assessment and evaluation of public school students, classroom management methods of instruction, multiculturalism, or other current educational issues. S/U grading. PRQ: Consent of discipline department.

ILAS 225. SOUTHEAST ASIA: CROSSROADS OF THE WORLD (3). Interdisciplinary introduction to the varied cultures of Southeast Asia focused on the general theme of unity within diversity. Examination of the linkage of Southeast Asian art, music, dance, literature, and architecture with other segments of the Buddhist, Islamic, Christian, and animistic societies of the region.

ILAS 250. EXTERNAL EDUCATION (3 to 30). Credit for approved apprenticeships and related training programs supervised by professional specialists. A maximum of 30 semester hours may be accumulated if approved. Applications for credit must be made in the College of Liberal Arts and Sciences office.

ILAS 261. LANGUAGE, MIND, AND THOUGHT (3). Functioning of the human mind from the perspectives of anthropology, computer science, linguistics, neuroscience, philosophy, and psychology. Interdisciplinary consideration of perception, language, reasoning, artificial intelligence, culture, and models of cognition.

ILAS 290. TOPICS IN INTERDISCIPLINARY STUDIES (3). Use of concepts, methods, and objectives of two or more disciplines to explore selected problems and issues. May be repeated to a maximum of 6 semester hours when topic varies.

ILAS 300. DISCIPLINE-BASED CLINICAL EXPERIENCES FOR THE ILLINOIS STANDARD HIGH SCHOOL CERTIFICATE (1 to 3). Discipline-based clinical experiences for students admitted to teacher certification programs in the College of Liberal Arts and Sciences. Activities take place on and off campus and in a variety of school/classroom settings. Each semester hour of course credit requires 30 hours of clinical experiences. May be repeated to a maximum of 3 semester hours. S/U grading. PRQ: Consent of student's certification program and of College of Liberal Arts and Sciences coordinator of teacher certification.

ILAS 301. SECOND CLINICAL EXPERIENCE (1 to 2). Discipline-based early clinical experiences for prospective middle/junior and senior high school teachers. Focus on issues of adolescent development and learning relevant to successful teaching of the subject discipline. Includes a minimum of 40 clock hours of supervised and formally evaluated participation in the discipline as it is taught on both the middle/junior and senior high school levels, and formal sessions on topics such as assessment and evaluation, multiculturalism, practical applications of adolescent development and learning to teaching strategies, and other current educational issues. S/U grading. PRQ: Consent of discipline department.

ILAS 341. THEMATIC STUDIES IN COMPARATIVE LITERATURE (3). Study in two or more national literatures of a significant, common theme: for example, the Absurd, Justice, Utopia-Dystopia, Faust, King Arthur, or the use of mythology or a mythic character. Theme announced in *Schedule of Classes.*

ILAS 342. GENRE STUDIES IN COMPARATIVE LITERATURE (3). Study in two or more national literatures of epic, drama, novel, short fiction, pastoral, or romance. Genre announced in *Schedule of Classes.*

ILAS 343. PERIOD STUDIES IN COMPARATIVE LITERATURE (3). Study in two or more national literatures of a distinct historical-literary period: for example, the Renaissance, the baroque, the Enlightenment, romanticism, realism-naturalism, or modernism. Period announced in *Schedule of Classes.*

ILAS 350. LESBIAN, GAY, BISEXUAL, AND TRANSGENDER STUDIES (3). Survey of issues and theories in lesbian, gay, bisexual, and transgender studies. Interdisciplinary study of sexual orientation and gender identity, with attention to race, ethnicity, and class.

ILAS 351. RESEARCH IN LESBIAN, GAY, BISEXUAL, TRANSGENDER STUDIES (3). Survey and practical exploration of methods, issues, and problems in formulating and conducting research in lesbian, gay, bisexual, and transgender studies, both within specific academic fields and as an interdisciplinary effort, with attention to evaluation and interpretation of source materials, field research methods, and critical issues. PRQ: ILAS 350.

ILAS 390. INTERNSHIP (3). Work as an intern in an off-campus agency in activities related to one of the majors in the college. Reading and paper preparation under the supervision of a faculty member in the college. May be repeated once. S/U grading. PRQ: Consent of major department and college; junior or senior standing.

ILAS 401. THIRD CLINICAL EXPERIENCE (1 to 2).
A. Secondary
B. Middle School
Discipline-based early clinical experiences for prospective middle/junior and senior high school teachers. Observations, evaluation, and practicum on methods and problems in teaching in the discipline. Includes a minimum of 40 clock hours of supervised and formally evaluated experiences in the particular setting likely for the student teaching experience. ILAS 401B may be used in partial fulfillment of middle grades endorsement requirements. S/U grading. PRQ: Consent of discipline department.

ILAS 405. INTERNATIONAL RELATIONS COLLOQUIUM (3). This course will permit advanced international relations students to discuss, with guest specialists from academia, government, and business, subjects which are not ordinarily part of a structured international relations curriculum. Among the subjects which may be covered are

aspects of international scientific cooperation, international efforts to deal with environmental concerns, international planning for the peaceful uses of atomic energy, international financial and monetary questions, and the multinational corporation. PRQ: Consent of the international relations coordinator.

ILAS 410. LATIN AMERICAN STUDIES: BRAZIL: NEW WORLD IN THE TROPICS (3). Interdisciplinary study of Brazil and its major problems in the 20th century. Emphasis on habitat, culture, economic development, and political systems. PRQ: One year of Portuguese and consent of director.

ILAS 411. LATIN AMERICAN STUDIES: 20TH CENTURY HISPANIC AMERICA (3). Interdisciplinary study of the 20th century Hispanic America and its most vexing problems. Emphasis on habitat, culture, economic development, and political systems. PRQ: One year of Spanish and consent of director.

ILAS 420. INSTITUTE FOR INTERDISCIPLINARY INSTRUCTION OF GIFTED CHILDREN (3).
A. General Introduction
B. Elementary School
C. Middle School
D. High School
Design of interdisciplinary instruction for gifted children. Topics include the characteristics, identification, and evaluation of gifted children, the rationale for gifted education, program prototypes, and an introduction to differentiated curriculum. PRQ: Consent of college.

ILAS 421. INTRODUCTION TO THE GIFTED EDUCATION NETWORK (3). Training in use of technology with the gifted and talented, designing and developing materials for use as either stand alone or with an Internet connection to the World Wide Web. New skills put into practice by developing teaching units. Open only to teachers who have received level 1 and 2 gifted institute training. PRQ: Permit only.

ILAS 440. INDEPENDENT STUDY (1 to 3). Independent research on a topic approved by faculty members in two or more departments within the college. May be repeated to a maximum of 6 semester hours. PRQ: Junior or senior standing and consent of college.

ILAS 444. COMPARATIVE URBANIZATION (3). Cross-cultural and interdisciplinary analysis of urbanization focusing on selected developing areas and the United States. Topics include crosscultural definitions of urbanism, functions and services of secondary cities, and crosscultural comparison of problems associated with urban growth and rural developments. PRQ: Junior or senior standing.

ILAS 490. ADVANCED TOPICS IN INTERDISCIPLINARY STUDIES (3). Topics from the sciences, social sciences, and/or humanities treated from an interdisciplinary perspective. May be repeated to a maximum of 6 semester hours when topic varies.

ILAS 494X. WRITING CENTER PRACTICUM (1 to 3). *Crosslisted as ENGL 494.* Theoretical and practical instruction in tutoring, required for all undergraduate writing consultants in the University Writing Center. Includes research on cross-curricular writing tasks in a supervised on-the-job situation. May be repeated to a maximum of 3 semester hours with consent of department.

Women's Studies (WOMS)

WOMS 230. WOMEN IN CONTEMPORARY AMERICA (3). Multidisciplinary analysis of maturational and social issues facing American females.

WOMS 235. WOMEN ACROSS CULTURES AND CENTURIES (3). The dominant cultural patterns affecting women in different historical periods and social settings, and their expression in literature.

WOMS 324. WOMEN IN SCIENCE (3). *Crosslisted as GEOG 324X and BIOS 324X.* Why women are underrepresented in many scientific fields. The history of women in science, the current status of women in science, and the representation of women in various scientific disciplines.

WOMS 332. GROWING UP FEMALE (3). Examination of the experience of growing up female in America from an interdisciplinary perspective, with attention to differences and similarities in ethnicity, race, class, and sexual orientation. Theories and research on female development from such disciplines as psychology, literature, biology, and sociology. Topics may include gender socialization, family relationships, education, communication and the media, sexuality and romance.

WOMS 390. INTERNSHIP IN WOMEN'S STUDIES (1 to 3). Reading and paper preparation under supervision of a faculty member. May be repeated to maximum of 6 semester hours. S/U grading. PRQ: Junior or senior standing and consent of director.

WOMS 430. SPECIAL TOPICS IN WOMEN'S STUDIES (3). May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Junior or senior standing or consent of director.

WOMS 432. FEMINIST THEORY (3). Concepts, methods, and concerns of feminist theory; systematic overview of contemporary feminist thought; theoretical approaches to key feminist issues. PRQ: WOMS 230 or WOMS 235, or consent of director.

WOMS 434. WOMEN, MEN, AND LANGUAGE (3). *Crosslisted as ENGL 434X.* Examination of empirical evidence pertaining to language variation by sex and gender identity within the framework of sociolinguistics. Focus on characteristics of feminine and masculine speech and conversational styles, societal attitudes towards them, and their implications for men and women in society. Biological foundations and sociogenesis of sex differences in language; interaction effects on language variation of other social variables such as age, class, and ethnic identity; and crosscultural differences.

WOMS 439. INDEPENDENT STUDY IN WOMEN'S STUDIES (3). Independent research on an approved topic in women's studies. Student must present research prospectus approved by a faculty member before a permit is granted. PRQ: 9 semester hours in the minor, including WOMS 230 and WOMS 235.

Department of Anthropology (ANTH)

The Department of Anthropology offers both a B.A. and a B.S. degree for majors in anthropology. Either degree may be obtained with honors and can be used to gain certification to teach social sciences at the junior and senior high school levels. The department also offers a minor in anthropology, which should be of special interest to students in art history, biological sciences, business management, foreign languages and literatures, geology, humanities, social sciences, and visual communications.

Some of the department's lower-division courses can be used by non-majors toward fulfilling the distributive studies area requirements in the university's general education program. The department participates in the interdisciplinary minors in black studies, international studies, Latino/Latin American studies, linguistics, Southeast Asian studies, urban studies, and women's studies.

Major in Anthropology (B.A. or B.S.)

Requirements in Department (36-37)

ANTH 210 - Exploring Archaeology (3)
ANTH 220 - Introduction to Cultural Anthropology (3)
ANTH 230 - Anthropology of Language (3)
ANTH 240 - General Physical Anthropology (3)
At least one 300- or 400-level course in each of the following categories (12-13)
- Archaeology
- Ethnology
- Linguistic anthropology
- Physical anthropology

At least two 300- or 400-level courses selected from the following categories (6)
- Cultural-social anthropology
- History and theory of anthropology
- Special or multidisciplinary

At least 6 additional hours of electives chosen in anthropology in consultation with faculty adviser (6)

Requirements outside Department (B.A., 9-21; B.S., 19-24)

Either completion of a minor or at least 9 semester hours of course work at the 200 level or above in a single discipline other than anthropology to be chosen in consultation with faculty adviser. Work taken to meet the special requirements for the B.A. or B.S. degree will not be counted toward the 9 hours. (9)

For the B.A. degree
Fulfillment of foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree.")

For the B.S. degree
Laboratory science/mathematical/computational skills sequence (10-15)
(See "College Requirement for the B.S. Degree.")

Total Hours for a Major in Anthropology: 45-58 (B.A.) OR 55-61 (B.S.)

Recommendation

Students seeking an advanced degree here or elsewhere should work closely with a faculty adviser and be aware of graduate school entrance requirements, such as satisfactory completion of a course in statistics.

Teacher Certification

Students who want to be certified to teach anthropology/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in anthropology.

Admission

Students are admitted to the certification program when they have

- established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;
- attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;
- completed at least 6 semester hours of anthropology at NIU and earned a minimum GPA of 3.00 in all anthropology courses taken at the college/university level;
- completed the core competency requirements in English and oral communication;
- completed at least 20 clock hours of approved early clinical experiences; and
- obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in anthropology. In addition, they must complete ANTH 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, ANTH 496X must be taken in the semester immediately prior to enrollment in student teaching.

Other Requirements

Students must complete HIST 400, Student Teaching in History/Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the Department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

Majors with at least a 3.30 overall GPA and a minimum 3.50 GPA in anthropology courses are eligible for the Anthropology Honors Program. Additional requirements for earning the baccalaureate degree in anthropology with honors include taking 15 semester hours of honors courses in anthropology, taking 6 semester hours of ANTH 499H (senior thesis) in lieu of 6 semester hours of electives in anthropology, and presenting an acceptable senior thesis.

Minor in Anthropology (18)

Two of the following (6)
- *ANTH 210 - Exploring Archaeology (3)
- *ANTH 220 - Introduction to Cultural Anthropology (3)
- *ANTH 230 - Anthropology of Language (3)
- *ANTH 240 - General Physical Anthropology (3)

Four courses in anthropology in consultation with faculty adviser (12)

Six or more semester hours in the minor must be taken at NIU.

Course List

Prerequisites for courses may be waived with the consent of the department. Courses numbered 200 and above in anthropology are grouped in the following categories.

–00 through –09: Ethnology
–10 through –19, Archaeology
–20 through –29, Cultural-social anthropology
–30 through –39, Linguistic anthropology
–40 through –49, Physical anthropology
–50 through –59, History and theory of anthropology
–60 through –69, Special or multidisciplinary
–90 through –99, General

101. HUMAN ORIGINS (3). Approaches to the study of human physical origins and early cultural development. Analysis of the fossil record of humans and differentiation into modern populations. The origin of major stone tool traditions. Examination of early cultural developments such as art, agriculture, city life, and ancient states.

102. RISE OF CIVILIZATION (3). Forces leading to the emergence of early civilizations in the Near East, Egypt, China, Mesoamerica, and South America. Aspirations, problems, and needs addressed in the art, literature, history, and other enduring contributions of the pristine civilizations of antiquity. Examination of ancient achievements and values from humanistic and artistic perspectives.

120. ANTHROPOLOGY AND HUMAN DIVERSITY (3). Survey of human cultural diversity throughout the world. Anthropological approaches to understanding multiculturalism. Examination of factors underlying human diversity.

210. EXPLORING ARCHAEOLOGY (3). Survey of the basic concepts and principles employed by archaeologists as cultural anthropologists with illustrations from world prehistory.

220. INTRODUCTION TO CULTURAL ANTHROPOLOGY (3). The concept of culture; its origin, development, and diversity. Culture as an adaptive mechanism. Theory and method of cultural anthropology applied to the analysis of selected cultures.

230. ANTHROPOLOGY OF LANGUAGE (3). Nature and function of language; anthropological motivations for the study of language; contributions of anthropological linguistics; distribution and relationships of languages of the world.

240. GENERAL PHYSICAL ANTHROPOLOGY (3). Outline of the principles and subject matter of human evolutionary history, race formation and classification, genetics, evolutionary theory, and interrelations between cultural and physical anthropology.

301. AMERICAN CULTURE (3). Examination of a series of topics in American culture including the impact of industrialism, the rise of feminism, the current popularity of sports, the role of advertising, and the changes in the structure of the family. Focus on what anthropological culture theory can tell us about our own culture.

302. ASIAN AMERICAN CULTURES (3). Introduction to the study of Asian American cultures. Review of the history of migration from Asian countries to the United States, and examination of the contemporary ethnographic portrayals of different Asian communities. Emphasis on the lives of Southeast Asian refugees and migrants who have come to the U.S. in the last 25 years. Uses anthropological writings on changing patterns of kinship, social organization, economics and religion, as well as first-person literary accounts.

303. INDIANS OF NORTH AMERICA (3). Description and analysis of the cultures of native peoples of North America. Social, economic, and religious life; languages and arts of representative North American Indian groups.

304. MUSLIM CULTURES IN ANTHROPOLOGICAL PERSPECTIVE (3). Cultures and social issues of the Islamic regions in the Middle East and Southeast Asia. History, development, and spread of Islam. Anthropological aspects of selected Middle Eastern and Southeast Asian cultures, including social organization, gender, marriage, and law in an Islamic context.

310. THE ARCHAEOLOGY OF OCEANIA AND SOUTHEAST ASIA (3). Descriptive and comparative study of the origins and rise of complex societies in Oceania and Southeast Asia.

312. THE ARCHAEOLOGY OF ANCIENT EGYPT (3). Early Neolithic times to the Greco-Roman period, including Neolithic agriculture, society, and brutal ritual; political formation and unification under the early Pharaohs; the building and use of monumental burial architecture; and societal collapse and reformation.

324X. INTRODUCTION TO WORLD MUSIC I (3). *Crosslisted as MUSC 324*. Survey of the folk and traditional music in Third World cultures. Examination of the relationship of music to selected aspects of the people and culture of South Asia, Southeast Asia, East Asia, and Oceania.

325X. INTRODUCTION TO WORLD MUSIC II (3). *Crosslisted as MUSC 325.* Survey of the folk and traditional music in European and Third World cultures. Examination of the relationship of music to selected aspects of the people and culture of the Middle East, Eastern Europe, Europe, Africa, and the Americas.

328. ANTHROPOLOGY OF RELIGION (3). Description and analysis of religious and ritual activities and how they articulate with other aspects of culture. PRQ: ANTH 220.

331. LANGUAGE AND CULTURE (3). Relationships of language to other forms of cultural behavior; influence of linguistic structure and categories on modes of thought and cognition; reflections of cultural emphases in language; forms of language and their distribution.

341. PRIMATOLOGY (3). Study of non-human primates, both living and extinct. Focus on primate biology in its broadest sense. Topics include primate taxonomy, behavior, natural history traits, ecology, reproduction, feeding and locomotor adaptations, anatomy, and paleontology. Lectures and laboratory. PRQ: ANTH 240 or consent of department.

342. FORENSIC ANTHROPOLOGY (3). Detailed survey of the methods and techniques used by forensic anthropologists. Topics include crime scene investigation, body exhumation, body decomposition, age at death, sex determination, ancestry, and individual identification. Discussion of individual case reports and mass disaster cases.

361. CROSS-CULTURAL PERSPECTIVES ON WOMEN (3). Examination of the diversity of women's lives cross-culturally from an experiential and structural viewpoint. Emphasis on the interlocking dimensions of women's experiences including nationality, ethnicity, class, sexual orientation, and religion. Drawing on examples from Latin America, Africa, the Middle East, Asia, and ethnic populations within the U.S., course readings explore commonalities and differences in women's social positions, cultural knowledges, life-cycle changes, and gender relationships.

* Available for general education credit.

363. INTERNATIONAL CONTACT IN ANTHROPOLOGICAL PERSPECTIVE (3). Broad overview of anthropological perspectives on development and corporate culture in the international setting. Population shifts, global trade, ideology, technology, and organizational cultures with special attention to applied problems of intercultural communication in Western and non-Western corporate settings.

402. PEOPLES AND CULTURES OF THE PACIFIC ISLANDS (3). Ethnographic and ethnological survey and analysis of the societies and cultures of the Pacific Islands. Primary focus on the lifeways of the indigenous peoples of the area with a secondary focus on the role which information about the lifeways of peoples of the Pacific Islands has played in the development of anthropological theory. PRQ: ANTH 220 or consent of department.

403. PEOPLES AND CULTURES OF AFRICA SOUTH OF THE SAHARA (3). Descriptive and analytic examination of representative African societies dealing with their culture, histories, economic, political, and social organization, as well as religion and arts. Contemporary problems of culture change and social transformation within the context of decolonization. PRQ: ANTH 220 or consent of department.

405. PEOPLES OF MESOAMERICA (3). Cultural background of Mesoamerican ethnic groups; historical and contemporary sociocultural systems of Indian, black, and mestizo groups in rural and urban areas. Attention to the processes of acculturation, urbanization, and current cultural modifications influenced by contemporary society. PRQ: ANTH 220 or consent of department.

407. PEOPLES AND CULTURES OF INSULAR SOUTHEAST ASIA (3). Introduction to the social and cultural diversity of insular Southeast Asia, especially Indonesia, Malaysia, and the Philippines. Emphasis on the region's geography, colonial experience, and patterns of social organization kinship, religious belief, ethnic pluralism, and authority.

408. PEOPLES AND CULTURES OF MAINLAND SOUTHEAST ASIA (3). Introduction to the social and cultural diversity of mainland Southeast Asia–Burma, Thailand, Laos, Cambodia, and Vietnam. Emphasis on the area's geography, history, kinship and social organization, religious beliefs (especially Theravada Buddhism), ethnic diversity, and contemporary problems.

410. ARCHAEOLOGY OF AFRICA (3). Detailed, analytical survey of African prehistory from the earliest evidence of human occupation to the time of extra-African contact. PRQ: ANTH 210 or consent of department.

411. ARCHAEOLOGY OF EUROPE (3). Origins and development of prehistoric cultures in Europe from the Paleolithic to the Neolithic. PRQ: ANTH 210.

412. ANCIENT NORTH AMERICA (3). Survey of ancient peoples and archaeological cultures throughout North America with attention to their lifeways, artifacts, and natural settings. PRQ: ANTH 210 or consent of department.

413. ILLINOIS ARCHAEOLOGY (3). Examination of the current state of knowledge of Illinois archaeology. Recent archaeological discoveries in our state provide a much improved picture of prehistoric life here. Time covered is from the first arrival of people in what is now Illinois until the establishment of cities during the last century. Emphasis on the technology, natural setting, chronology, subsistence, population, settlement, and social structure for each archaeological tradition and time period. PRQ: ANTH 210 or consent of department.

414. ARCHAEOLOGY OF MESOAMERICA (3). Descriptive and analytical examination of pre-Columbian cultures of Mexico and Central America. PRQ: ANTH 210.

415. ARCHAEOLOGY OF THE AMERICAN SOUTHWEST (3). Origins and diversification of prehistoric cultures in the Southwest. PRQ: ANTH 210.

417. ARCHAEOLOGY OF SOUTH AMERICA (3). Description and analysis of human occupation of the South American continent from its initial occupation to the arrival of the Spanish conquistadores. Emphasis on interrelationships between areas and models purporting to explain sociopolitical evolution. PRQ: ANTH 210.

418. ARCHAEOLOGICAL METHOD AND THEORY (3). Development of archaeological theory from the mid-19th century to the present. Assessment of interactions among archaeological theory, research design, and fieldwork. Connections of archaeological theory to major anthropological issues. PRQ: ANTH 210 or consent of department.

419. ARCHAEOLOGY OF MEDITERRANEAN CIVILIZATIONS (3). Detailed analysis of the rise of civilizations in the Mediterranean basin from the Neolithic to the Iron Age. Comparative course focusing on the regions of the Balkans, Egypt, Greece, the Levant, and Italy.

421. SOCIAL ORGANIZATION (3). Description of social systems; exploration of the regularities and variations in the several facets of social structure emphasizing the interrelatedness of the parts of culture and culture as a functioning entity. PRQ: ANTH 120 or ANTH 220.

422. GENDER IN SOUTHEAST ASIA (3). Detailed analysis of conceptions of gender across Southeast Asia. Review of theoretical approaches in gender studies and ethnographic material from the region. PRQ: ANTH 120 or ANTH 220, or consent of department.

426. POLITICAL ANTHROPOLOGY (3). Political activities and how they articulate with other institutions. Presentation of various interpretations and theories that have been applied to the data. PRQ: ANTH 220.

427. ECONOMIC ANTHROPOLOGY (3). Analysis of economic behavior and institutions and how they articulate with other aspects of culture. PRQ: ANTH 220.

428. RITUAL AND MYTH (3). In-depth examination of the approaches, theories, and methodologies in the anthropological study of ritual and myth. Topics include the feasibility of distinguishing ritual from non-ritual both cross-culturally and within particular societies, most recent studies of ritual focusing on sacrifice, ritual as performative action, ritual symbolism, ritual function vs. form, types of rituals, the study of myths, structural-symbolic analysis of sacred myths, phenomenological-symbolic analysis of myths, myths of origin and myths of death, and the relationship between myth and ritual. Ritual and myth also considered in relation to ideas about the maintenance of cosmological and socio-political systems. PRQ: ANTH 220 or consent of department.

433. FUNDAMENTALS OF COGNITIVE ANTHROPOLOGY (3). Examination of relationship between human mind and human culture. Critical analysis of major areas of cognitive anthropological research in kinship, ethnobiology, cultural models, distributed cognition, and spacial relationships. Consideration of the interface of contemporary cognitive anthropology and general cognitive science. PRQ: ANTH 230 or consent of department.

435. SPACE IN LANGUAGE AND CULTURE (3). *Crosslisted as GEOG 435X.* Exploration of how various languages express spatial relationships by using different parts of speech, how culture shapes ways of organizing and using space in daily and ritual behavior, and the mental organization of spatial knowledge, with emphasis on universal patterns that generate cultural and individual realizations. PRQ: ANTH 230 or consent of department.

440. FOSSIL HUMANS (3). The human fossil record. Emphasis on interpretation of morphology and theory in human paleontology. PRQ: ANTH 240 or consent of department.

441. EVOLUTIONARY PERSPECTIVES ON SEX AND GENDER (3). Theories of the evolution of sex differences and associated gender roles in humans and non-human primates including primate mating systems, sperm competition, mate choice, parental care, aggression, and cooperation. PRQ: ANTH 240 or consent of department.

442. BIOCULTURAL PERSPECTIVES ON THE HUMAN SKELETON (3). Topical and interpretative study of the human skeleton with relation to the study of past human populations, especially in relation to the analysis of prehistoric economy, social behavior, and physical interaction with the biocultural environment. Reconstruction of paleodiet, impact of undernutrition on growth and development, bone microstructure, dental disease, other markers of stress, impact of specific behavioral repertoires on the human skeleton, and masticatory and nonmasticatory adaptations of the craniofacial complex. PRQ: ANTH 240 or consent of department.

443. HUMAN ADAPTATION AND VARIATION (3). History of the concept of race; current approaches to human variability. Selective aspects of continuous and discontinuous traits: blood groups,

hemoglobins, etc.; race and I.Q.; sex differences. Ecological influences on human variation. PRQ: ANTH 240.

444. PRIMATE ECOLOGY AND CONSERVATION (3). Study of living non-human primates with an understanding of how primates have adapted to their environment and how this information is essential for conservation planning. PRQ: ANTH 240 or consent of department.

445. PRIMATE EVOLUTION (3). *Crosslisted as BIOS 435X.* Primate fossil record, emphasis on adaptation and phylogeny. PRQ: ANTH 240 or consent of department.

446. THE HUMAN SKELETON (3). Detailed study of human bones and teeth, including growth, sex identification, aging and stature estimation, and bone pathologies. PRQ: ANTH 240 or consent of department.

447. PRIMATE ANATOMY (3). The skeletal anatomy of living primates including primate dental and skeletal adaptations, phylogeny, speciation, and biogeography. PRQ: ANTH 240 or consent of department.

450. ETHICS AND RESEARCH DESIGN IN ANTHROPOLOGY (3). Examination of ethical decision making in anthropological procedures and an introduction to research designs and organizational skills in the practice of anthropology. PRQ: One 200-level anthropology course or consent of department.

451. HISTORY AND THEORY OF ANTHROPOLOGY (3). Overview of the history of anthropological institutions and the historical development of anthropological concepts. Attention given to schools of thought and associated leading anthropologists in all major fields of anthropology. PRQ: ANTH 220.

452. CONTEMPORARY CULTURE THEORY (3). Examination of the development of anthropological culture theory starting with structuralism and moving on through symbolism to postmodernism. Focus on the writings of the major theorists. PRQ: ANTH 220.

460. METHODS IN ETHNOGRAPHY (3). Theory and practice in methods of ethnographic research. Problems and techniques in participant observation, structured and nonstructured interviews, questionnaires, indirect measures, documentation, and recording. Ethics of ethnographic research. PRQ: ANTH 220 or consent of department.

462. MUSEUM METHODS (3). Lectures and practical experience in various aspects of museum work; design and construction of museum exhibits in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

463. ETHNOHISTORY (3). Approaches to locating, evaluating, and utilizing oral and written historical sources in ethnographic and anthropological investigations. PRQ: ANTH 220.

465. MEDICAL ANTHROPOLOGY (3). Survey of interactions between infectious and parasitic diseases, genetic predispositions, and specific cultural habits, attitudes, and beliefs. Includes cognitive systems as they relate to disease theory in various cultures and examples of folk medical practices and beliefs. PRQ: ANTH 220 or ANTH 240 or consent of department.

467. APPLIED ANTHROPOLOGY (3). Uses of anthropological concepts, knowledge, and insights to maintain or change cultures and societies combined with a consideration of the ethical problems in programs of directed culture change. PRQ: ANTH 220 or consent of department.

468. ANTHROPOLOGY OF GENDER (3). Survey of current theory and research on gender, sexuality, and representations of the body. Examination of debates about the significance of gender and sex in primate and human evolution, physical anthropology, and sociobiology. In seminar format, students also explore cross-cultural notions of gender and analyze the intersection of race/class/gender and the historical construction of sexuality and conceptions about "the body" in the sciences, the arts, ethnography, and popular culture. PRQ: ANTH 220 or consent of department.

490. ANTHROPOLOGICAL RESEARCH TRAINING (3 to 6).
A. Cultural Anthropology
B. Ethnology
C. Archaeology
D. Physical Anthropology
E. Ethnohistory
J. Linguistic Anthropology
Training and experience in field and/or laboratory research. Students participate, under supervision, in basic research projects. Any lettered section may be repeated to a maximum of 6 semester hours. Total credit may not exceed 6 semester hours. PRQ: Consent of department.

491. CURRENT TOPICS IN ANTHROPOLOGY (3). May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

492. PROSEMINAR IN ANTHROPOLOGY (3). Intensive seminar work on selected topics in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

493. ANTHROPOLOGY FIELD STUDY (1 to 6).
A. Cultural Anthropology
B. Ethnology
C. Archaeology
D. Physical Anthropology
E. Ethnohistory
J. Linguistic Anthropology
Directed field study or field school. Each topic may be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

498. INDEPENDENT STUDY IN ANTHROPOLOGY (1 to 6). Special readings, topics, and research projects in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Anthropology Faculty

Judy L. Ledgerwood, Ph.D., Cornell University, associate professor, chair
Giovanni Bennardo, Ph.D., University of Illinois, associate professor
Winifred Creamer, Ph.D., Tulane University, professor
Daniel L. Gebo, Ph.D., Duke University, Distinguished Research Professor
Michael J. Kolb, Ph.D., University of California at Los Angeles, associate professor
Sibel Kusimba, Ph.D., University of Illinois, assistant professor
Mark W. Mehrer, Ph.D., University of Illinois, associate professor
Andrea K. Molnar, Ph.D., Australian National University, associate professor
Leila Porter, Ph.D., Stony Brook University, assistant professor
Susan D. Russell, Ph.D., University of Illinois, professor
Kendall M. Thu, Ph.D., University of Iowa, associate professor
Katharine Wiegele, Ph.D., University of Illinois, adjunct assistant professor
Ann Wright-Parsons, M.S., Northern Illinois University, museum director

Department of Biological Sciences (BIOS)

The Department of Biological Sciences offers a B.S. degree which can be used to prepare for graduate studies in the biological sciences and to gain certification to teach general science and biology at the middle school and high school levels. It has been designed so students can conveniently obtain a minor in chemistry. A departmental honors program is available for outstanding students.

The department also offers a minor in biological sciences and several courses that can be used by non-majors toward fulfilling the science area requirement in the university's general education program. In addition, courses offered by the department are required in several majors across the university and in the interdisciplinary minor in environmental studies. Students in pre-professional health-related programs are required to have course work in the biological sciences. Students interested in pursuing such careers should seek assistance early in their studies from a pre-professional adviser in the College of Liberal Arts and Sciences. (See "Pre-professional Studies.")

Major in Biological Sciences (B.S.)

A minimum of 15 of the 47 semester hours of biology required for the major must be taken at NIU.

Requirements in Department (47)[1]

BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1)
BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 - Fundamentals of Biology II Laboratory (1)
BIOS 308 - Genetics (5)
BIOS 494 - Biology Competency (1)
Electives from biological sciences courses at the 300 or 400 level (29)

Students should consult with a departmental adviser for assistance in selecting the appropriate sequence of courses to constitute a track of study in one of the following subdisciplines of biology.

Animal organismal biology
Cellular and molecular biology
Ecology and evolution
General
Microbiology
Plant molecular biology
Plant organismal biology
Physiology and development
Teacher certification

Lists of courses appropriate to each of the above tracks are available in the department office and from department undergraduate advisers. Other tracks can be developed in consultation with an adviser.

Requirements outside Department (28-30)

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
CHEM 330 - General Organic Chemistry I (3),
OR CHEM 336 - Organic Chemistry I (3)
CHEM 331 - General Organic Chemistry II (3),
OR CHEM 337 - Organic Chemistry II (3)
*MATH 229 - Calculus I (4), and MATH 230 - Calculus II (4),
OR *MATH 211 - Calculus for Business and Social Science (3), and STAT 301 - Elementary Statistics (4)
*PHYS 210 and *PHYS 211 - General Physics I and II (8),
OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4), and *PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)

Total Hours for a Major in Biological Sciences: 75-77

Recommendation

Many graduate programs in the biological sciences, such as those at NIU, require the Graduate Record Examinations (including the Subject Test in biology or biochemistry) for admission. Students intending to pursue graduate study in the biological sciences should take these examinations early in their senior year.

Teacher Certification

All students who seek certification to teach biology and general sciences in Illinois schools should consult with the departmental certification adviser as soon as possible and also refer to the "Teacher Certification Requirements" section of this catalog.

Undergraduate biology majors may apply for admission to teacher certification in biology and general science at the end of the sophomore year, except in the case of transfer students who normally apply at the end of their first semester at NIU. Students who already possess the baccalaureate or higher degree and wish to pursue certification without becoming a candidate for a degree should consult with the biology certification adviser as early as possible.

Admission and Retention Requirements in the Discipline

Students interested in pursuing certification in biology and general science must apply in writing to the departmental certification adviser. Students must complete a program of study approved by the departmental certification adviser designed to provide a broad background in the discipline meeting requirements for the undergraduate major in biological sciences at NIU. Core course requirements remain the same as for all majors in biological sciences. In addition, those seeking certification must complete the equivalent of the mathematics sequence MATH 211 and STAT 301, BIOS 300, BIOS 305, BIOS 313, BIOS 316, BIOS 317, BIOS 355, BIOS 484, and BIOS 494, and a selection of elective biology courses chosen in close consultation with the departmental certification adviser to ensure adequate breadth and depth of discipline background. A grade of C or better is required in all course work in biological sciences. Students must also complete *COMS 100, *ENGL 103, and *ENGL 104 with a grade of C or better; higher numbered courses may be substituted if approved by the departmental certification adviser.

Undergraduates must have an overall NIU GPA of at least 2.50 and a minimum GPA in applicable biology, chemistry, and physics courses of 2.80. Students with a baccalaureate degree in biological sciences obtained elsewhere must have a combined GPA of at least 2.80 across the applicable biology, chemistry, and physics course work in their previous major and complete at least two upper-level courses in biology at NIU with a minimum GPA of 3.00.

*Available for general education credit.
[1]There is a 50-semester-hour limit of biology courses whether or not they apply to the major

All potential certification candidates must

have a satisfactory review of progress with the departmental certification adviser each semester after admission to the certification program.

take and pass the ICTS Basic Skills Test prior to applying to the certification program.

take and pass the ICTS Biology Content Test prior to applying to student teaching.

Professional Development Phase and Student Teaching

The state of Illinois requires a minimum of 100 clock hours of relevant early clinical experiences prior to student teaching. This requirement may be satisfied by successfully completing the following courses.

ILAS 201 - Introductory Clinical Experience (1)
ILAS 301 - Second Clinical Experience (1)
BIOS 401 - Third Clinical High School/Middle School Experience in Biology (2)

Students must satisfactorily complete a series of discipline-based pedagogy course work.

BIOS 201X - The Professional Secondary Science Teacher (1)
BIOS 301X - The Interdisciplinary Secondary Science Teacher (1)
BIOS 402X - Interdisciplinary Teaching of Science in Secondary Education (3)
BIOS 403 - Methods in Teaching Biology (3)
BIOS 485 - Student Teaching in Biology (10)
BIOS 486 - Transition to the Professional Biology Teacher (1)
PHYS 494 - Use of Technology in Secondary Science Teaching (2)

Additional Requirements

EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)

The State of Illinois has moved from a course-based set of requirements for certification to course and standards-based requirements. Approved certification programs must have requirements that meet or exceed the state requirements. A list of current state minimum requirements is available from the Illinois State Board of Education web page. The biology certification program requirements are designed to prepare candidates for certification both to meet state requirements and to demonstrate that they meet state teaching standards.

At this time, State requirements include the possession of an appropriate baccalaureate degree from an accredited institution, a minimum of 32 semester hours in the field, pre-student teaching, clinical experiences at the 6-12 level or proof of teaching experience at the 6-12 level, student teaching or an approved teaching experience, passage of the basic skills and secondary certification subject matter examinations of the Illinois Certification Testing System and demonstration that the candidate has met teaching standards for the biology teacher. Contact the discipline coordinator for information on the necessary criteria that experiences must meet to be used to meet certification requirements.

Additional course work may be required as determined and approved by the biology certification coordinator to meet state standards for the preparation of teachers, certification requirements and student needs.

Degree with Honors

The degree Bachelor of Science with honors in biological sciences will be awarded to students satisfying the following requirements.

During the first semester of the junior year the student will confer with the Department of Biological Sciences honors adviser regarding his or her intent to pursue the departmental honors degree. With the approval of the honors adviser and a departmental faculty member under whom the student will engage in independent study, the following are required in the sequence indicated.

Successful completion of 1-3 semester hours of BIOS 370, Directed Research in Biology, during the second semester of the junior year.[2]

Recommendation of the honors adviser and the faculty research supervisor to continue toward the degree with honors. The student must maintain a GPA of at least 3.50 in all departmental and extradepartmental requirements.

Successful completion of 6 semester hours (taken over the two semesters of the senior year) of BIOS 495H, Honors Biology Directed Research, culminating in a satisfactory research paper.[2]

Minor in Biological Sciences (20)

BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1)
BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 - Fundamentals of Biology II Laboratory (1)
Electives from biological sciences courses at the 300 or 400 level (8)

A minimum of 6 hours of the electives must be completed at NIU.

Course List

101. PLANT PRODUCTS AND HUMAN AFFAIRS (3). Includes basic botany and the geographic origins of economically important plants which produce products used by various peoples worldwide. Emphasis on plant products having an influence on societies (cereal crops, medicines, drugs, etc.). Does not count for credit toward the major in biological sciences.

103. GENERAL BIOLOGY (3). Basic chemistry, chemistry of living systems, cell structure and function, energetics, classical and molecular genetics, information flow, reproduction, evolution and diversity of life, and ecology. Not available for credit for majors in biological sciences or to students with previous credit in BIOS 104 (or its equivalent).

104. GENERAL BIOLOGY (4). Chemistry of living systems, cell structure and function, energetics, classical and molecular genetics, information flow, reproduction, evolution and diversity of life, and ecology. Laboratory experience included. Not available for credit for majors in biological sciences or to students with previous credit in BIOS 103 or its equivalent. PRQ: One semester of college chemistry.

105. GENERAL BIOLOGY LABORATORY (1). Laboratory component of BIOS 104. Designed for students who have had BIOS 103 or its equivalent and need BIOS 104 or its equivalent. Not available for credit for majors in biological sciences or to students with previous credit in BIOS 104 or its equivalent. PRQ: BIOS 103 or its equivalent and one semester of college chemistry.

*Available for general education credit.
[1]There is a 50-semester-hour limit of biology courses whether or not they apply to the major
[2] Collectively, a maximum of 6 semester hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 399H, BIOS 490, BIOS 495H, and BIOS 499H may be applied to the major.

106. ENVIRONMENTAL BIOLOGY (3). Biological basis of environmental science and human influence on the ecosystem. Emphasis on the biological relations among natural resources, pollution, and human population dynamics. Not open for credit for majors in biological sciences.

109. HUMAN BIOLOGY (3). Includes evolution, ecology, physiological regulation, nutrition, genetics, immune responses, reproduction, development, aging, and cancer. Not open for credit for majors in biological sciences.

199H. FRONTIERS OF BIOLOGY (1). Seminar for all Honors biology majors. Introduction to current areas of research in many fields of biology, presented by professors engaged in research in each of the fields. Should be taken in the first year at NIU (as freshman or transfer student).

201X. THE PROFESSIONAL SECONDARY SCIENCE TEACHER (1). *Crosslisted as CHEM 201X, GEOL 201, and PHYS 201X.* Introduction to the role of the professional science teacher. Includes philosophical trends in teaching (and how they affect the science teacher), major factors affecting how science is taught, and introduction to science content/teaching standards. PRQ: Consent of department. CRQ: ILAS 201.

205T. ORGANISMAL DIVERSITY (3). Overview of organisms including the bacteria, protists, fungi, plants, and animals. Introduction to scientific philosophy, classification, phylogeny, and evolution. Three hours of lecture per week. Course designed for biological sciences majors. Not available for credit to students with credit in BIOS 205. CRQ: BIOS 207.

207. ORGANISMAL DIVERSITY LABORATORY (1). Designed to accompany BIOS 205T. One 3-hour period per week. Not available for credit to students with credit in BIOS 205. CRQ: BIOS 205T.

208T. FUNDAMENTALS OF BIOLOGY I (3). Introduction to fundamental processes of organisms operating at the molecular and the cellular level of organization. Other topics include chemical and molecular aspects of life, cellular metabolism, genetic information flow, theory of inheritance, genetic engineering, and principles of cellular physiology. Three hours of lecture per week. Course designed specifically for biological sciences majors, but open to others. Not available for credit to students with credit in BIOS 208. PRQ: CHEM 210T and CHEM 212 or chemistry proficiency demonstrated by departmental examination. CRQ: BIOS 210.

209T. FUNDAMENTALS OF BIOLOGY II (3). Continuation of BIOS 208T. Introduction to higher levels of biological organization from the organism to the ecosystem. Topics include organismal physiology, mechanisms of micro- and macro-evolution, animal behavior, and the dynamics and organization of populations, communities, and ecosystems. Three hours of lecture per week. Course designed specifically for biological sciences majors, but open to others. Not available for credit to students with credit in BIOS 209. PRQ: BIOS 208T. CRQ: BIOS 211.

210. FUNDAMENTALS OF BIOLOGY I LABORATORY (1). Designed to accompany BIOS 208T. One 3-hour period per week. Not available for credit to students with credit in BIOS 208. CRQ: BIOS 208T.

211. FUNDAMENTALS OF BIOLOGY II LABORATORY (1). Designed to accompany BIOS 209T. One 3-hour period per week. Not available to students with credit in BIOS 209. CRQ: BIOS 209T.

213. INTRODUCTORY BACTERIOLOGY (3). Fundamental principles of bacteriology including morphological, chemical, and nutritional aspects and the role of bacteria in medicine, industry, and public health. Not available for credit for majors in biological sciences. PRQ: BIOS 104 or BIOS 208T or BIOS 210.

300. CELL BIOLOGY (4). Cellular structure and function. Cellular organelles, their biochemistry and involvement in metabolic processes. Membranes and energy conversions. Chromosomes and their behavior. Molecular genetics and genetic controls of differentiation and metabolic processes. Four hours of lecture and one discussion session per week. PRQ: CHEM 211T and CHEM 213. CRQ: BIOS 209T and BIOS 211.

301X. THE INTERDISCIPLINARY SECONDARY SCIENCE TEACHER (1). *Crosslisted as CHEM 301X, GEOL 301, and PHYS 301X.* Seminar on the role of a science teacher in an interdisciplinary and/or integrated science class and how a science curriculum is designed based on state and national standards. Focus on skills all science teachers must possess regardless of specific discipline including knowing how to apply the following topics in ways appropriate to the age and development of the students in a classroom; safety procedures, classroom management, designing and conducting demonstrations, experiments, performance assessments, differentiated curriculum, and uses of technology. PRQ: Consent of department. CRQ: BIOS 402X and ILAS 301.

305. BIOLOGY OF LAND PLANTS (4). Land plants studied in an evolutionary sequence. Basic anatomy, morphology, and physiology. Emphasis on the probable selective advantage of structures unique to each group of plants. Three hours of lecture and one three-hour laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

308. GENETICS(5). Principles of heredity, including Mendelian inheritance, molecular nature of the gene, and quantitative and population genetics. Three hours of lecture and four hours of laboratory per week. PRQ: BIOS 205T and BIOS 207. CRQ: BIOS 209T and BIOS 211.

311. FUNCTIONAL HUMAN ANATOMY (4). Regional approach to the study of structure and function of the muscular and skeletal systems of the extremities, trunk, neck, and head including the nervous and vascular systems as they pertain to the muscular systems. Gross dissection. Lecture and laboratory. Not available for credit for majors in biological sciences who have credit for BIOS 357, BIOS 358, or BIOS 446. PRQ: Sophomore standing.

313. MICROBIOLOGY (4). Fundamental characteristics of bacteria and their viruses, including their biochemical, molecular, genetic, immunological, and economic significance. Three hours of lecture and three hours of laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, BIOS 211, CHEM 211T, and CHEM 213.

316. GENERAL ECOLOGY (4). Structure and dynamics of biotic populations, communities, and ecosystems. Three hours of lecture and three hours of laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

317. EVOLUTION (3). Principles of organic evolution as illustrated by molecular, developmental, ecological, morphological, and paleontological data. Mechanisms of microevolution and macroevolution are compared. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

320X. BIOPOLITICS AND HUMAN NATURE (3). *Crosslisted as POLS 320.* The moral and political debates provoked by Darwinian biology in explaining human nature. Possible topics include sex differences, crime, the IQ debate, the moral sense, and the neurology of social behavior.

322X. POLITICS AND THE LIFE SCIENCES (3). *Crosslisted as POLS 322*. Analysis of the major social problems and political issues emerging from rapid advances in the life sciences with emphasis on biotechnology and biomedical policy. PRQ: POLS 100 or consent of department. Recommended: BIOS 103, BIOS 106, BIOS 109, or BIOS 205T and BIOS 207.

324X. WOMEN IN SCIENCE (3). *Crosslisted as WOMS 324* and *GEOG 324X*. Why women are underrepresented in many scientific fields. The history of women in science, the current status of women in science, and the representation of women in various scientific disciplines.

355. HUMAN PHYSIOLOGY (4). Functions of human organ systems at the organ, cellular, and molecular levels, with emphasis on integration of functions in the human body. Either BIOS 355 or BIOS 357, but not both, may be counted for credit toward the minor in biological sciences. PRQ: BIOS 209T and BIOS 211. CRQ: PHYS 211.

357. HUMAN ANATOMY AND PHYSIOLOGY(5). Functional and structural relationships of organ systems in humans. Three hours of lecture and four hours of laboratory. Not available for credit for majors in biological sciences. Students may not receive credit toward the minor for both BIOS 355 and BIOS 357. Students may not receive credit for both BIOS 357 and BIOS 358. PRQ: BIOS 104 or BIOS 208T and BIOS 210.

358. HUMAN ANATOMY LABORATORY (2). Structure of human tissues, organs, and organ systems. Four hours of laboratory. Not available for credit for students with credit in BIOS 311, BIOS 357, or BIOS 446. PRQ: BIOS 104.

359. HUMAN NEUROBIOLOGY (4). Biology of the human nervous system, with emphasis on the anatomy and physiology of the central nervous system. PRQ: BIOS 355 or BIOS 357.

370.[2] DIRECTED RESEARCH IN BIOLOGY (1 to 3).
A. Microbiology
B. Ecology and Evolution
C. Cell Biology
D. Plant Science
Directed research problems under the guidance of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: At least a B average in biological sciences and permission of department.

401. THIRD CLINICAL HIGH SCHOOL/MIDDLE SCHOOL EXPERIENCE IN BIOLOGY (2). Discipline-based early clinical experience for students seeking teacher certification in biology and general science. Observations, evaluation, methods, and problems practicum in subject discipline teaching. Includes a minimum of 40 clock hours of supervised and formally evaluated experiences. S/U grading. PRQ: Consent of department. CRQ: BIOS 403.

402X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY EDUCATION (3). *Crosslisted as CHEM 493X, GEOL 483, and PHYS 493X.* Methods and theory for the teaching of interdisciplinary science in grades 6-12. Exploration of the nature and purpose of science and its underlying assumptions, the social and cultural challenges in science teaching, and the potential solutions to these challenges through research, discussion, and reflection. Use of state and national science standards to develop student learning objectives and to design inquiry-based lesson plans, micro-teaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio. PRQ: Consent of department.

403. METHODS IN TEACHING BIOLOGY (3). Methods and materials and theory for teaching secondary biology and middle school science. Emphasis on goal-setting, and planning logically sequenced learning experiences that are multisensory, interactive and that include opportunity for evaluation of on-going learning. Discussion and microteaching. Does not count as credit for the undergraduate major in biological sciences. PRQ: Minimum overall GPA of 2.70 in all applicable biology, chemistry, and physics courses, and consent of department. CRQ: BIOS 401. Students with a baccalaureate degree in biological sciences from elsewhere must complete at least two upper-level biology courses at NIU with a minimum GPA of 3.00.

405. AMERICAN ECOSYSTEMS(1 to 8). Laboratory and field analysis of environments. Lectures and laboratories on campus plus extensive field experience. May be repeated to a maximum of 8 semester hours. PRQ: BIOS 316 and consent of department.

406. CONSERVATION BIOLOGY (4). Ecological bases for conservation of biological diversity, resource management, ecosystem restoration, and relationship of conservation practices to human welfare. Laboratory includes computer simulations and applied conservation field work in local nature preserves. Field trips required. PRQ: BIOS 316 or BIOS 317, or consent of department.

410. PLANT ANATOMY (4). Structure of vascular plants, primarily flowering plants. Three hours of lecture and three hours of laboratory. Laboratory includes formal assignments and independent projects. PRQ: BIOS 305 or consent of department.

411. PLANT PHYSIOLOGY (4). Physical and chemical aspects of the functions of higher plants. Two hours of lecture and four hours of laboratory. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

412. MYCOLOGY (4). Culture, morphology, and economic significance of the fungi. Two hours of lecture and four hours of laboratory. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211, or consent of department.

413. MICROBIAL PHYSIOLOGY (3). Physical and chemical aspects of the functions of bacteria and other microorganisms. Two hours of lecture and two hours of laboratory. PRQ: BIOS 300, BIOS 313, and CHEM 330 or CHEM 336.

415. WATER MICROBIOLOGY (3). Designed to acquaint the student with normal and pollutional microorganisms found in water, their sources and control. Standard methods of detection and enumeration as well as new experimental approaches will be stressed in the laboratory. PRQ: BIOS 313; and CHEM 330 or CHEM 336.

417. PATHOGENIC MICROBIOLOGY (4). Consideration of human viruses, bacteria, and fungi and their host-parasite relations. Two hours of lecture and four hours of laboratory. PRQ: BIOS 313 or consent of department.

418. HUMAN HEREDITY (3). Inheritance in humans. Does not count for credit toward the major in biological sciences. PRQ: BIOS 103, BIOS 104, or BIOS 109, or equivalent.

420. PLANT PATHOLOGY (3). Specific causal agents of plant diseases, their identification and control measures. Parasitism and the economy of crop disease. Two hours of lecture and two hours of laboratory. PRQ: BIOS 209T and BIOS 211, or consent of department.

422X. PLANT-SOIL INTERACTIONS (4). *Crosslisted as GEOG 422.* Chemical and physical properties of soils affecting vegetation, segregation of natural plant communities, and managed systems. Lecture, laboratory, and field experience. PRQ: BIOS 103 or BIOS 104, and GEOG 302, or consent of department.

423. PRINCIPLES OF VIROLOGY (3). Essential principles of viral biology including the foundations of virology, elements of virus life cycle, viral pathogenesis, and means of virus control and evolution, with the emphasis on molecular structures and processes. PRQ: BIOS 300, BIOS 313, and CHEM 330 or CHEM 336.

430. PLANT SYSTEMATICS (4). Systematics and evolution of higher plants including contemporary phylogeny. Six hours of lecture with scheduled laboratory periods. PRQ: BIOS 209T and BIOS 211, or consent of department.

431X. PHYSIOLOGICAL PSYCHOLOGY (4). *Crosslisted as PSYC 431.* Understanding the physiological functioning of the body as it affects behavior. Emphasis on neurological factors involved. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either BIOS 104 or PSYC 300; or consent of department.

433. BEHAVIORAL ECOLOGY (3). Examples and theories of how behavior influences survival and reproduction in different environments. PRQ: BIOS 209T and BIOS 211, or consent of department.

435X. PRIMATE EVOLUTION (3). *Crosslisted as ANTH 445.* Primate fossil record, emphasis on adaptation and phylogeny. PRQ: ANTH 240 or consent of department.

437X. PRIMATE ANATOMY (3). *Crosslisted as ANTH 447.* The skeletal anatomy of living primates including primate dental and skeletal adaptations, phylogeny, speciation, and biogeography. PRQ: ANTH 240 or consent of department.

439. MOLECULAR EVOLUTION (3). Evolution of nucleic acids and proteins and the modifying actions of mutational events. Survey of different types of molecular data and methods of determination and analysis. Consideration of the broader implications of molecular changes for our improved understanding of macroevolution and phylogeny retrieval. Two hours of lecture and three hours of laboratory per week. PRQ: BIOS 308 or BIOS 317, or consent of department.

440. IMMUNOBIOLOGY (3). Biochemistry and interactions of antigens, antibodies, and lymphocytes; development of the immune system; and medical applications and current immunological techniques. PRQ: BIOS 300 or BIOS 313 and CHEM 330 or CHEM 336.

441. EXPERIMENTAL IMMUNOLOGY (2). Laboratory course in theoretical and experimental knowledge of basic immunological techniques. CRQ: BIOS 440.

442. EVOLUTION AND THE CREATIONIST CHALLENGE (3). Evolutionary theory and tenets of present-day anti-evolutionists with emphasis on providing students with the skills to articulate the theory of evolution as it applies to the biological sciences. Not a substitute for a formal course in evolutionary theory. Recommended for students pursuing careers in secondary science education. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211, or consent of department.

[2] Collectiively, a maximum of 6 semester hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 399H, BIOS 490, BIOS 495H, and BIOS 499H may be applied to the major.

444. CELL AND TISSUE CULTURE (3). Basic laboratory techniques in plant and animal tissue culture. Topics include growth analysis, mutation induction, hybridoma production, cell cycle analysis, and cell fusion. Topics and experiments from recent literature will be emphasized. One hour of lecture and two 3-hour laboratories per week. PRQ: BIOS 300 and CHEM 330 or CHEM 336.

445. HUMAN HISTOLOGY (4). Microscopic anatomy of human cells and tissues. Emphasis on correlating cell structure at the light and ultramicroscopic level with physiology in individual tissue and organs of the human body. Two hours of lecture and four hours of laboratory. PRQ: BIOS 209T and BIOS 211.

446. GROSS HUMAN ANATOMY (6). Gross anatomy of the human body, including dissection, with functional, histological, developmental, and clinical correlates. Two hours of lecture and nine hours of laboratory. PRQ: BIOS 355 or BIOS 357.

447. COMPARATIVE VERTEBRATE ANATOMY (4). Relationships of vertebrate classes as demonstrated by embryological, morphological, and paleontological evidence. Three hours of lecture and four hours of laboratory. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

448. AQUATIC ECOLOGY (4). Structure and function of freshwater communities as influenced by biotic and abiotic interactions. Two hours of lecture and five hours of laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, BIOS 211, and BIOS 316.

453. ENTOMOLOGY (3). Insects and other terrestrial arthropods: anatomy, behavior, classification, ecology, economic importance, and physiology. Two hours of lecture and one 3-hour laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

454. DEVELOPMENTAL BIOLOGY (4). Mechanisms of eukaryotic development. Emphasis on model animal systems. Two hours of lecture and four hours of laboratory per week. PRQ: BIOS 300 and CHEM 330 or CHEM 336.

455. COMPARATIVE PHYSIOLOGY (3). General physiological principles and functions in vertebrates and invertebrates. Three hours of lecture and three hours of laboratory per week. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211.

456. BIOLOGY OF FISHES, AMPHIBIANS, AND REPTILES (4). Evolution, taxonomy, physiology, behavior, ecology, and distribution of fishes, amphibians, and reptiles. Laboratory work and field trips emphasize identification of Illinois forms. PRQ: BIOS 205T, BIOS 207, BIOS 209T, BIOS 211, or consent of department.

457. BIOLOGY OF BIRDS AND MAMMALS (4). Evolution, taxonomy, physiology, behavior, ecology, and distribution of birds and mammals. Laboratory work and field trips emphasize identification of Illinois forms. PRQ: BIOS 205T, BIOS 207, BIOS 209T, and BIOS 211, or consent of department.

458. VERTEBRATE PALEONTOLOGY (3). *Crosslisted as GEOL 458X.* Survey of the history of vertebrates, focusing on key evolutionary innovations such as the evolution of bone, the invasion of land, and the origin of endothermy. Examination of fossils and the interpretation of them in the context of their geological settings. PRQ: BIOS 205T, BIOS 207, BIOS 209T and BIOS 211; or GEOL 320; or consent of department.

461. ENDOCRINOLOGY (3). Classic mammalian endocrine systems examined with emphasis on cellular and molecular mechanisms of action. Topics include endocrine cell signaling, molecular mechanisms of hormone action, and some discussion of endocrine pathology. Lecture material and readings from the current professional literature. PRQ: BIOS 355 or consent of department.

462. BIOGEOGRAPHY (3). Role of ecological, evolutionary, and historical factors in explaining the past and current distributions of plants and animals. Current theory and applications to species preservation and nature reserve design. Three hours of lecture. PRQ: BIOS 316 or consent of department.

464. CELL SIGNALLING (3). Principles of chemical communication between cells. Detailed examination of chemical messengers, receptors, and intracellular signal transduction mechanisms involved in regulation of cell function, growth and development. PRQ: BIOS 300 and CHEM 330 or CHEM 336, or consent of department.

465. CELLULAR PHYSIOLOGY (3). Principles underlying cellular activity. Topics include the biochemistry of cells, cell organelles, cell environment, membranes, and energy conversions. PRQ: BIOS 300 or consent of department.

466X. INTRODUCTION TO MICROPALEONTOLOGY (3). *Crosslisted as GEOL 471.* Morphology, classification, paleogeography, stratigraphic application, and geochemistry of calcareous, siliceous, and phosphatic microfossils. PRQ: BIOS 205T and BIOS 207 and GEOL 320, or consent of department.

467. MOLECULAR BIOLOGY OF EUKARYOTES (3). Mechanisms of gene expression and regulation of gene activity in eukaryotic organisms. PRQ: BIOS 300 and CHEM 330 or CHEM 336, or CRQ: BIOS 473X or consent of department.

468X. GEOMICROBIOLOGY (3). *Crosslisted as GEOL 468.* Role of microorganisms in diverse environments at and below the surface of the earth. Topics include life in extreme environments, biodegradation and remediation, biogeochemical cycling, and astrobiology examined from the perspectives of geochemistry, microbial ecology, molecular biology, and ecosystem studies. PRQ: GEOL 120 or BIOS 313, or consent of department.

469X. INVERTEBRATE PALEONTOLOGY (3). *Crosslisted as GEOL 470.* Principal invertebrate fossil forms of the geologic record, treated from the standpoint of their evolution, and the identification of fossil specimens. Several field trips required. Two hours of lecture and two hours of laboratory. PRQ: Major in biological sciences or geology.

470X. GENERAL BIOLOGICAL CHEMISTRY (3). *Crosslisted as CHEM 470.* Overall view of biochemistry including structure, properties, function, and metabolism of biologically important compounds. PRQ: CHEM 331 or CHEM 337.

471X. BIOLOGICAL CHEMISTRY LABORATORY (3). *Crosslisted as CHEM 471.* Experiments in the isolation, purification, and characterization of biomolecules by chromatographic, electrophoretic, and centrifugation techniques; enzyme kinetics; electron transport in mitochondria and microsomes. One lecture and two 3-hour laboratory periods per week. PRQ: CHEM 325. CRQ: BIOS 470X, BIOS 472X, CHEM 470, or CHEM 472.

472X. BIOLOGICAL CHEMISTRY I (3). *Crosslisted as CHEM 472.* Detailed study of the structure and properties of proteins, carbohydrates, lipids, and nucleic acids. Properties of enzymes. Bioenergetics, including oxidative phosphorylation and photosynthesis. PRQ: CHEM 331 or CHEM 337.

473X. BIOLOGICAL CHEMISTRY II (3). *Crosslisted as CHEM 473.* Detailed study of the metabolism of carbohydrates, lipids, and nitrogenous compounds, including proteins and nucleic acids. Metabolic regulation. Genetic information. PRQ: CHEM 472 or BIOS 472X or consent of department..

474. ADVANCED BIOCHEMICAL TECHNIQUES (3). Theory and practice in the use of techniques for the isolation and characterization of macromolecules such as ultrafiltration, amino acid analysis, ultracentrifugation, optical rotatory dispersion, circular dichroism, absorption spectroscopy, calorimetry, and rapid reaction kinetics. Two 4-hour laboratory periods including one hour of lecture a week. PRQ: BIOS 471X or CHEM 471.

475. NEURAL DEVELOPMENT (3). Examination of the principles that govern the development of the nervous system from a single fertilized cell in various organisms. PRQ: BIOS 355 or BIOS 455; CHEM 211T and CHEM 213; MATH 155; and PHYS 211 or PHYS 273.

476. PLANT GENETICS (3). Examination of plant genetic variation at the level of the genome, population, and higher taxa, using both classical and molecular approaches. How natural and domesticated plant populations are shaped by evolutionary and human forces. PRQ: BIOS 308.

477. HUMAN GENETICS (3). Study of human genes, genome organization, and genetic diseases, with emphasis on DNA-based techniques. PRQ: BIOS 308.

478. BIOINSTRUMENTATION FOR CELL AND MOLECULAR BIOLOGY (4). Classroom instruction and hands-on training on contemporary equipment used in cell and molecular biology, including analysis of data generated by the equipment. Pipetting (calibration, precision, and accuracy), protein/DNA gel electrophoresis,

transblotting and immunodetection, image acquisition and analysis, isoelectric focusing, PCR, centrifugation, column chromotography, spectrophotometry/spectrofluorometry, and confocal microscopy. Two hours lecture, six hours laboratory including open laboratory. PRQ: BIOS 300 and PHYS 211, or consent of department.

479. BIOTECHNOLOGY APPLICATIONS AND TECHNIQUES (3). Detailed study of the methodology, techniques, and applications of biotechnology in both plant and animal systems with emphasis on the use of genomics and genetic engineering approaches in agricultural and medical biotechnology. PRQ: BIOS 300 or BIOS 308.

480. BIOCOMPUTING (3). Computing technology as a multifaceted tool applicable to a wide range of biology sub-disciplines through the development of a broad range of computing skills related to the Windows/NetWare environment. Experience in application of general and specialty software in addressing various biological questions. Three hours of lecture and laboratory. PRQ: BIOS 209T and BIOS 211.

481. VISION AND THE VISUAL SYSTEM (3). Anatomy and physiology of the human and animal visual system, including descriptions of phototransduction, retinal representation in the cortex, perception of motion and depth, motion blindness, color vision, face recognition, and interpretation and processing of information in the brain. PRQ: BIOS 208T, BIOS 210, BIOS 209T, and BIOS 211, or consent of department.

484X. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as CHEM 490X, GEOL 475, and PHYS 490X.* Examination of major concepts of science and how they evolved. Comparison and contrast of the role and practice of science in various cultures and examination of the interaction between science, technology, and culture.

485. STUDENT TEACHING IN BIOLOGY (10). Student teaching in the discipline for a full semester. Assignments to be arranged by the department. Not available for credit in the major. PRQ: BIOS 400 with a grade of C or better and consent of department.

486. TRANSITION TO THE PROFESSIONAL BIOLOGY TEACHER (1). A transitioning experience in which the certification candidate achieves closure on the initial phase of professional preparation and, upon that foundation, charts a path for continuing professional growth as a practicing teacher. Candidate will reflect on the preparatory experience and complete documentation demonstrating ability to perform as a qualified biology teacher. Such documentation will include, but not be limited to, the electronic portfolio, a professional development plan, and a resume. PRQ: Consent of department. CRQ: BIOS 485.

490.[2] COOPERATIVE EDUCATION (3). Enrollment restricted to students formally participating in NIU's cooperative education program. S/U grading. PRQ: Consent of department and the university's director of cooperative education.

491. RECOMBINANT DNA TECHNIQUES LABORATORY (4). Advanced experiments using recombinant DNA technology. Two three-hour laboratories per week plus required, unsupervised research TBA outside normal class times. PRQ: BIOS 300 and BIOS 308.

493. TOPICS IN BIOLOGY (1 to 3).
A. Physiology
B. Development and Morphogenesis
C. Genetics
D. Microbiology
E. Ecology/Environmental Biology
G. Evolution Systematics
K. Molecular Biology
M. Research Methods
Lectures, discussions, and reports on topics of special interest in a particular field of biology. Topics may be selected in one or more fields of biology to a total of 6 semester hours toward any one degree. PRQ: Consent of department.

494. BIOLOGY COMPETENCY (1). Discussion of key concepts in biology. Grades based on performance on a national standardized biology examination. Required for graduation. PRQ: Senior status, and biological sciences major.

495H.[2] HONORS BIOLOGY DIRECTED RESEARCH (1 to 6). Directed research, under the guidance of a faculty member, for students pursuing the B.S. degree with Honors in Biological Sciences. May be repeated to a maximum of 6 semester hours. PRQ: Permission of department, 1-3 semester hours of BIOS 370, and a GPA of at least 3.50 in departmental and extradepartmental courses taken as requirements for the major.

499H.[2] UNIVERSITY HONORS: BIOLOGY(1 to 6). Independent study in biology under the guidance of a faculty member. Designed for students pursuing University Honors but not Honors in Biological Sciences. PRQ: 1-3 semester hours of BIOS 370 and approval of the department and the University Honors Program.

Biological Sciences Faculty

J. Michael Parrish, Ph.D., University of Chicago, Distinguished Research Professor, chair
Richard J. Becker, Ph.D., Northern Illinois University, assistant chair for business and operations
Hans T. Beck, Ph.D., City University of New York Graduate School, assistant professor
C. Jackson Bennett, Ph.D., University of Wisconsin, adjunct professor
Anne Berg, Ph.D., Yale University, associate professor
Neil W. Blackstone, Ph.D., Yale University, professor
W. Elwood Briles, Ph.D., University of Wisconsin, adjunct professor
Jozef J. Bujarski, Ph.D., Adam Mickiewicz University (Poznan, Poland), Distinguished Research Professor
Ana Calvo, Ph.D., University of Alcala (Madrid), assistant professor
Sonya B. Conway, Ph.D., University of California, Berkeley, professor
Thomas P. Conway, Ph.D., University of Illinois, adjunct associate professor
Melvin Duvall, Ph.D., University of Minnesota, St. Paul, associate professor
Elon W. Frampton, Ph.D., University of Illinois, adjunct associate professor
Kenneth W. Gasser, Ph.D., Washington State University, associate professor
James Grosklags, Ph.D., University of Wisconsin, adjunct associate professor
Richard Hahin, Ph.D., University of Maryland, professor
Arnold Hampel, Ph.D., University of Wisconsin, Distinguished Research Professor, adjunct
Laszlo Hanzely, Ph.D., Southern Illinois University, Distinguished Teaching Professor, adjunct
Leslie Hecht, Ph.D., University of California, Riverside, adjunct assistant professor
Stuart Hill, Ph.D., University of Montana, associate professor
Gabriel P. Holbrook, Ph.D., University of York (U.K.), associate professor
Christopher J. Hubbard, Ph.D., Wake Forest University, associate professor
Michael E. S. Hudspeth, Ph.D., Wayne State University, professor
Mitrick A. Johns, Ph.D., University of Oregon, associate professor
Barbara P. Johnson-Wint, Ph.D., Michigan State University, associate professor
Bethia H. King, Ph.D., Purdue University, associate professor
Richard B. King, Ph.D., Purdue University, associate professor
David P. Lotshaw, Ph.D., State University of New York, Albany, associate professor
Long Mao, Ph.D., Chinese Academy of Sciences (Beijing), Ph.D.,John Innes Center for Plant Science Research (Norwich, U.K.), assistant professor

[2] Collectiively, a maximum of 6 semester hours of credit (9 in the case of students admitted to the department honors proogram) in BIOS 370, BIOS 399H, BIOS 490, BIOS 495H, and BIOS 499H may be applied to the major.

Rangaswamy Meganathan, Ph.D., Oklahoma State University, Distinguished Research Professor
Peter L. Meserve, Ph.D., University of California, Distinguished Research Professor
Jon Miller, Ph.D., University of Nebraska at Lincoln, assistant professor
John L. A. Mitchell, Ph.D., Princeton University, Distinguished Research Professor
Virginia L. Naples, Ph.D., University of Massachusetts, professor
Lowell K. Nicolaus, Ph.D., North Dakota State University, adjunct associate professor emeritus
Bruce Patterson, Ph.D., New Mexico State University, adjunct professor
Neil O. Polans, Ph.D., University of California, Davis, associate professor
Bernard Salafsky, Ph.D., University of Washington, adjunct professor
O. Arne Schjeide, Ph.D., University of California, adjunct professor emeritus
Thomas L. Sims, Ph.D., University of Oregon, associate professor
Paul D. Sorensen, Ph.D., University of Iowa, adjunct professor
Joel P. Stafstrom, Ph.D., University of Colorado, associate professor
Marvin J. Starzyk, Ph.D., University of Wisconsin, adjunct professor emeritus
Ronald Toth, Ph.D., University of Massachusetts, professor
Patricia S. Vary, Ph.D., Stanford University, Distinguished Research Professor, adjunct
Carl N. von Ende, Ph.D., University of Notre Dame, associate professor
Linda Yasui, Ph.D., Florida State University, associate professor
Jerrold H. Zar, Ph.D., University of Illinois, adjunct professor
Shengde Zhou, Ph.D., Auburn University, assistant professor

Department of Chemistry and Biochemistry (CHEM)

The Department of Chemistry and Biochemistry offers a major leading to the B.S. degree with a choice of five different emphases, each of which requires courses in calculus, physics, and certain core courses in chemistry. Students who intend to pursue advanced degrees in chemistry or biochemistry, or who are planning careers as professional chemists or biochemists, should select emphasis 1 or emphasis 5, respectively. With appropriate electives, either emphasis 1 or emphasis 5 will be appropriate for students interested in forensic science. Emphases 2 and 3 are designed to prepare students for careers in teaching at the junior and senior high school levels. Emphasis 4 is designed for students intending to use training in chemistry as a preparation for professional school. An honors program is available for outstanding students.

The department also offers a minor in chemistry as well as several courses which can be used by non-majors toward fulfilling the science area requirement in the university's general education program. A number of its courses are required for majors in other departments.

Chemistry Placement Examination Policy

Students planning to take CHEM 210T must take the Chemistry Placement Examination, so they may begin their study of chemistry at the appropriate level.

Major in Chemistry (B.S.)

Emphasis 1. Chemistry

Certified by the Committee on Professional Training of the American Chemical Society.

Requirements in Department (49-50)

CHEM 210T - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
CHEM 211T - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
CHEM 325 - Analytical Chemistry I (4)
CHEM 336 and CHEM 337 - Organic Chemistry I and II (6)
CHEM 338 - Organic Chemistry Laboratory I (2)
CHEM 360 - Inorganic Chemistry I (3)
CHEM 425 - Analytical Chemistry II (4)
CHEM 440 and CHEM 441 - Physical Chemistry I and II (6)
CHEM 447 - Physical Chemistry Laboratory (3)
CHEM 460 - Inorganic Chemistry II (3)
CHEM 461 - Inorganic Chemistry Laboratory (1)
CHEM 470 - General Biological Chemistry (3)
CHEM 498/ CHEM 499H - Research (3)
Electives chosen with the advice of the chemistry faculty from the following or an appropriate advanced course in mathematics or physics (3-4)
- CHEM 339 - Organic Chemistry Laboratory II (2)
- CHEM 405 - Chemical Instrumentation (3)
- CHEM 435 - Physical Methods in Organic Chemistry (3)
- CHEM 446 - Theoretical Chemistry (3)
- CHEM 463 - Inorganic Chemistry III (3)
- CHEM 498/ CHEM 499H - Research (1-3)

Requirements outside Department (19-23)

*MATH 229 and MATH 230 - Calculus I and II (8)
MATH 232 - Calculus III (4),
OR MATH 336 - Ordinary Differential Equations (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4), and
*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4),
OR *PHYS 210 and *PHYS 211 - General Physics I and II (8), and PHYS 252 - Intermediate General Physics (3)

Total Hours for Emphasis 1, Chemistry: 68-73

Recommendations

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)
FLGE 101 and FLGE 102 - Beginning German (6),
OR FLRU 101 and FLRU 102 - Elementary Russian I and II (6)
MATH 334 - Foundations of Applied Mathematics (4)

Students interested in forensic science are encouraged to take at least one of the following.
- BIOS 355 - Human Physiology (4)
- BIOS 440 - Immunobiology (3), and BIOS 441 - Experimental Immunology (2)
- BIOS 477 - Human Genetics (3)
- CHEM 471 - Biological Chemistry Laboratory (3)
- STAT 301 - Elementary Statistics (4),
  OR STAT 350 - Introduction to Probability and Statistics (3)

Students should meet with a departmental adviser to determine the appropriate electives for their program of study.

Emphasis 2. Secondary Teaching

Students seeking certification should consult with the discipline coordinator as early as possible to make certain they meet certification requirements as well as those set by the university for graduation. In addition to the program of courses outlined below, the state provides alternative pathways to teacher certification. Contact the discipline coordinator for more information about these programs.

Requirements in Department (53-64)

CHEM 201X - The Professional Secondary Science Teacher (1)
CHEM 210T - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
CHEM 211T - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
CHEM 301X - The Interdisciplinary Secondary Science Teacher (1)
CHEM 325 - Analytical Chemistry I (4)
CHEM 336 and CHEM 337 - Organic Chemistry I and II (6)
CHEM 332 - General Organic Laboratory (2)
CHEM 425 - Analytical Chemistry II (4),
OR CHEM 360 - Inorganic Chemistry I (3),
OR CHEM 470 - General Biological Chemistry (3)
CHEM 440 - Physical Chemistry I (3)
CHEM 447 - Physical Chemistry Laboratory (3)
CHEM 490X - Science Across Time and Culture (2)
CHEM 493X - Interdisciplinary Teaching of Science in Secondary Education (3)
CHEM 494 - Use of Technology in Curriculum Development and Chemistry Teaching (3)
CHEM 495X (PHYS 495) - Teaching of Physical Sciences (3)
CHEM 496 - Transition to the Professional Chemistry Teacher (1)

* Available for general education credit.

CHEM 497 - Student Teaching (Secondary) in Chemistry/ Physical Sciences (7-12)
Electives from the following (4-9)
CHEM 360 - Inorganic Chemistry I (3)
CHEM 425 - Analytical Chemistry II (4)
CHEM 435 - Physical Methods in Organic Chemistry (3)
CHEM 470 - General Biological Chemistry (3)
CHEM 498 - Research (1-3)

Requirements outside Department

ILAS 201 - Introductory Clinical Experience (1) (must be taken concurrently with CHEM 201X)
ILAS 301 - Second Clinical Experience (1) (must be taken concurrently with CHEM 301X)
ILAS 401 - Third Clinical Experience (1) (must be taken concurrently with CHEM 495X)
*MATH 229 and MATH 230 - Calculus I and II (8)
*PHYS 210 and *PHYS 211 - General Physics I and II (8)

Other state requirements include educational psychology (including human growth and development), history and/or philosophy of education, and the psychology of exceptional children. Students should consult with the discipline coordinator in the Department of Chemistry and Biochemistry to determine which courses are approved for satisfying these requirements.

See "Teacher Certification Requirements" for additional information and requirements.

Recommendations

BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1)
BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
CSCI 240 - Computer Programming in C++ (4)
*GEOL 120 - Introductory Geology (3),
OR GEOL 325 - Solid Earth Composition (4)

Emphasis 3. General Science Teaching

Requirements for students seeking general science teaching certification in chemistry are the same as those for emphasis 2, except students may choose CHEM 460 - Inorganic Chemistry II (3), or CHEM 461 - Inorganic Chemistry Laboratory (1), as electives.

In addition, students seeking general science teaching certification are also required to take

BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1)
BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
*GEOL 120 - Introductory Geology (3),
OR GEOL 325 - Solid Earth Composition (4)

Emphasis 4. Chemistry for Pre-Professional Students[1]

Requirements in Department (32-33)

CHEM 210T - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
CHEM 211T - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
CHEM 325 - Analytical Chemistry I (4)
CHEM 330 and CHEM 331 - General Organic Chemistry I and II (6), and CHEM 332 - General Organic Laboratory (2),
OR CHEM 336 and CHEM 337 - Organic Chemistry I and II (6), and CHEM 338 - Organic Chemistry Laboratory I (2)
CHEM 440 - Physical Chemistry I (3)
CHEM 470 - General Biological Chemistry (3), and two electives from 300-400 level courses (6-7),
OR CHEM 472 and CHEM 473 - Biological Chemistry I and II (6), and one elective from 300-400 level courses (3-4)

No more than 3 semester hours of CHEM 498/CHEM 499H, Research, will be counted towards requirements in department.

Requirements outside Department (36)

Students seeking admission to professional schools should consult their adviser as early as possible to make certain they meet entrance requirements for their chosen field.

BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1)
BIOS 208T and BIOS 209T - Fundamentals of Biology I and II (6), and BIOS 210 and BIOS 211 - Fundamentals of Biology I and II Laboratory (2)
BIOS 355 - Human Physiology (4)
MATH 229 and MATH 230 - Calculus I and II (8)
*PHYS 210 and *PHYS 211- General Physics I and II (8),
OR *PHYS 253 - Fundamentals of Physics I: Mechanics (4), and *PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
Electives in biology at the 300-400 level (5)

Total Hours for Emphasis 4, Chemistry for Pre-Professional Students: 68-69

Emphasis 5. Biochemistry

Certified by the Committee on Professional Training of the American Chemical Society.

Requirements in Department (46)

CHEM 210T - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
CHEM 211T - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
CHEM 325 - Analytical Chemistry I (4)
CHEM 336 and CHEM 337 - Organic Chemistry I and II (6)
CHEM 338 - Organic Chemistry Laboratory I (2)
CHEM 425 - Analytical Chemistry II (4)
CHEM 440 - Physical Chemistry I (3)
CHEM 447 - Physical Chemistry Laboratory (3)
CHEM 460 - Inorganic Chemistry II (3)
CHEM 461 - Inorganic Chemistry Laboratory (1)
CHEM 471 - Biological Chemistry Laboratory (3)
CHEM 472 - Biological Chemistry I (3)
CHEM 473 - Biological Chemistry II (3)
CHEM 498/ CHEM 499H - Research (3)

Requirements outside Department (27-30)

BIOS 208T - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 - Fundamentals of Biology II Laboratory (1)
BIOS 467 - Molecular Biology of Eukaryotes (3)
*MATH 229 and MATH 230 - Calculus I and II (8)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4), and PHYS 273 - Fundamentals of Physics II: Electromagnetism (4),
OR *PHYS 210 and *PHYS 211 - General Physics I and II (8) and PHYS 252 - Intermediate General Physics (3)

Total Hours for Emphasis 5, Biochemistry: 73-76

Recommendations

Students are encouraged to take at least one of CHEM 498/ CHEM 499H - Research (3), and CSCI 230 - Computer Programming in Fortran (4).

Students interested in forensic science are encouraged to take at least one of the following.
BIOS 355 - Human Physiology (4)
BIOS 440 - Immunobiology (3), and BIOS 441 - Experimental Immunology (2)
BIOS 477 - Human Genetics (3)
STAT 301 - Elementary Statistics (4),
OR STAT 350 - Introduction to Probability and Statistics (3)

* Available for general education credit.
[1] Successful completion of the course of study for emphasis 4 fulfills the requirements for a minor in biological sciences.

Students should meet with a departmental adviser to determine the appropriate electives for their program of study.

Teacher Certification

Students interested in emphases 2 and 3 must declare their interest in teacher certification with the discipline coordinator in the Department of Chemistry and Biochemistry at their earliest opportunity. Students completing these emphases must also obtain a secondary endorsement in at least one subject other than chemistry. Graduate students seeking an endorsement in chemistry who already have a Standard High School Certificate (6-12) in the state of Illinois must complete 24 semester hours in the physical sciences with at least 10 semester hours in chemistry including 4 semester hours in laboratory work. Postbaccalaureate students who wish to pursue certification without becoming a candidate for a degree should consult with the discipline coordinator in the Department of Chemistry and Biochemistry as early as possible.

Admission Requirements

To be admitted to the certification program, students in emphases 2 and 3 must have

- established a file with the discipline coordinator in the Department of Chemistry and Biochemistry and completed satisfactory reviews of progress each semester after establishment of the file,
- attained junior standing,
- completed at least 12 semester hours at NIU with a minimum GPA of 2.50,
- completed at least 6 semester hours of chemistry at NIU,
- earned a minimum GPA of 2.50 in all chemistry courses taken at NIU,
- completed 6 semester hours of written communication and 3 semester hours of oral communication with grades of C or better,
- completed at least 20 clock hours of approved early clinical experiences, and
- obtained approval from the discipline coordinator in the Department of Chemistry and Biochemistry.

Retention Requirements

Students admitted to the certification program must

- maintain a GPA of 2.50 in all course work undertaken at NIU;
- maintain a minimum combined GPA of 2.70 in NIU courses numbered 200 and above in physical and biological sciences and mathematics;
- complete a satisfactory review of progress each semester with the discipline coordinator in the Department of Chemistry and Biochemistry; and,
- prior to student teaching (for emphasis 3, general science teaching), complete 8 semester hours of biological sciences, including at least 3 semester hours in courses numbered 200 and above.

General Requirements and Information

The program of courses for meeting certification requirements must be approved by the discipline coordinator in the Department of Chemistry and Biochemistry each semester prior to registration. Students are responsible for timely submission of all applications and permits required during the certification program.

The State of Illinois has established course and standards-based requirements for certification. Approved certification programs must have requirements that meet or exceed the state requirements. A list of the current state minimum requirements is available from the Illinois State Board of Education's web page. The department's certification program requirements are designed to prepare candidates both to meet state course requirements and to demonstrate that they meet state teaching standards.

Current requirements include the possession of an appropriate baccalaureate degree from an accredited institution, a minimum of 32 hours in the field, pre-student teaching clinical experiences at the 6-12 level or proof of teaching experience at the 6-12 level, student teaching or an approved teaching experience, passage of the basic skills and secondary certificate subject matter examinations of the Illinois Certification Testing System, and demonstration that the candidate has met science teaching standards.

Contact the discipline coordinator for information on the necessary criteria that experiences must meet to demonstrate fulfillment of certification requirements.

Degree with Honors

The B.S. degree with honors in chemistry will be awarded to students who have a minimum 3.50 GPA in all requirements, both in and outside the department; complete 13 semester hours of honors chemistry courses including CHEM 499H; and present a satisfactory senior thesis.

Minor in Chemistry (19)

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
Electives from chemistry courses numbered CHEM 325 and above, excluding CHEM 370 (11)

A minimum of 9 hours of the electives must be completed at NIU.

Course List

110. CHEMISTRY (3). Development of the fundamental principles and concepts of chemistry by lecture-demonstration, as well as the development of an appreciation of the nature of chemistry as a science. An historical development of the most important concepts and ideas. Methods and limitations of chemistry, its evolution and discussions of the problems currently being solved and created. Three hours of lecture per week. Not available for credit for students with previous credit in CHEM 210.

111. CHEMISTRY LABORATORY (1). Designed to accompany CHEM 110. One 3-hour period a week. CRQ: CHEM 110.

201X. THE PROFESSIONAL SECONDARY SCIENCE TEACHER (1). *Crosslisted as BIOS 201X, GEOL 201, and PHYS 201X*. Introduction to the role of the professional science teacher. Includes philosophical trends in teaching (and how they affect the science teacher), major factors affecting how science is taught, and an introduction to science content/ teaching standards. PRQ: Consent of department. CRQ: ILAS 201.

210T. GENERAL CHEMISTRY I (3). Fundamental laws and principles of chemistry; atomic structure and chemical bonding; stoichiometry; kinetic theory; gases; liquids; solids; solutions. Three lectures and one recitation per week. PRQ: MATH 110 and CHEM 110, or satisfactory performance on the Chemistry Placement Examination, or consent of department. Not available for credit to students with credit in CHEM 210. CRQ: CHEM 212.

211T. GENERAL CHEMISTRY II (3). Continuation of CHEM 210T. Kinetics, equilibria, thermodynamics, electrochemistry; descriptive chemistry of the elements. Three lectures and one recitation per week. Not available for credit to students with credit in CHEM 211. PRQ: CHEM 210T and CHEM 212. CRQ: CHEM 213.

* Available for general education credit.

212. GENERAL CHEMISTRY LABORATORY I (1). Designed to accompany CHEM 210T. One 3-hour period per week. Not available for credit to students with credit in CHEM 210. CRQ: CHEM 210T.

213. GENERAL CHEMISTRY LABORATORY II (1). Designed to accompany CHEM 211T. One 3-hour period per week. Not available for credit to students with credit in CHEM 211. CRQ: CHEM 211T.

230. INTRODUCTORY ORGANIC CHEMISTRY (3). Beginning organic chemistry for non-chemistry majors designed to follow CHEM 110 to provide a one-year sequence in general chemistry. PRQ: CHEM 110.

231. INTRODUCTORY ORGANIC CHEMISTRY LABORATORY (1). Designed to accompany CHEM 230. One 3-hour period a week. PRQ: CHEM 110 and CHEM 111. CRQ: CHEM 230.

301X. THE INTERDISCIPLINARY SECONDARY SCIENCE TEACHER (1). *Crosslisted as BIOS 301X, GEOL 301, and PHYS 301X.* Seminar on the role of a science teacher in an interdisciplinary and/or integrated science class and how a science curriculum is designed based on state and national standards. Focus on skills all science teachers must possess regardless of specific discipline including knowing how to apply the following topics in ways appropriate to the age and development of the students in a classroom: safety procedures, classroom management, designing and conducting demonstrations, experiments, performance assessments, differentiated curriculum, and uses of technology. PRQ: Consent of department. CRQ: CHEM 494 and ILAS 301.

325. ANALYTICAL CHEMISTRY I (4). Fundamentals of measurement, treatment of data and analysis of error. Emphasis on classical quantitative analysis and instrumental separation methods. Two hours of lecture and two 3-hour laboratory periods a week. PRQ: CHEM 211T and CHEM 213, and MATH 229 or equivalent.

330. GENERAL ORGANIC CHEMISTRY I (3). First semester of a two-semester course in general organic chemistry for minors and pre-professional students. Not available for credit for chemistry majors except in emphasis 4. Three lectures a week. PRQ: CHEM 211T and CHEM 213.

331. GENERAL ORGANIC CHEMISTRY II (3). Second semester of a two-semester course in general organic chemistry for minors and pre-professional students. Not available for credit for chemistry majors except in emphasis 4. Three lectures a week. PRQ: CHEM 330.

332. GENERAL ORGANIC LABORATORY (2). One-semester course in basic laboratory techniques. Not available for credit for emphasis 1 or emphasis 5 majors. Two 3-hour periods a week. CRQ: CHEM 330 or CHEM 336.

336. ORGANIC CHEMISTRY I (3). Modern structural organic chemistry with emphasis on a mechanistic approach to both classical and modern synthetic methods. Chemistry majors only or consent of department. Three lectures a week. PRQ: CHEM 211T and CHEM 213.

337. ORGANIC CHEMISTRY II (3). Continuation of CHEM 336. Chemistry majors only or consent of department. Three lectures a week. PRQ: CHEM 336.

338. ORGANIC CHEMISTRY LABORATORY I (2). Modern laboratory techniques in organic chemistry for students interested in careers in professional chemistry and biochemistry. Two 3-hour periods a week. Not available for credit for those having credit for CHEM 332. CRQ: CHEM 330 or CHEM 336.

339. ORGANIC CHEMISTRY LABORATORY II (2). Continuation of CHEM 338. Two 3-hour periods a week. PRQ: CHEM 338 or consent of department.

360. INORGANIC CHEMISTRY I (3). Introduction to the atomic structural basis for periodicity; ionic and covalent bonding theories essential to modern inorganic chemistry; the solid state: ionic lattices and nonmolecular compounds. Brief introduction to symmetry elements and point group classification. Correlation of structure and properties of inorganic compounds with emphasis on descriptive chemistry of the main group elements. Acid-base chemistry and nonaqueous solvents. Three lectures a week. PRQ: CHEM 211T and CHEM 213.

370. INTRODUCTORY BIOCHEMISTRY (3). Terminal course in beginning biochemistry for non-chemistry majors. Three lectures a week. PRQ: CHEM 230.

405. CHEMICAL INSTRUMENTATION (3). Measurements of signals generated by chemical instrumentation. Applications of active and passive components in amplifiers, comparison circuits, filter circuits, and mathematical function circuits in relation to chromatographic, electroanalytical, and spectrochemical systems. Electrical noise as a function of frequency is discussed in the context of signal sampling and achieving maximum signal-to-noise ratios. Analog and digital data acquisition and computer controlled measurements. Two lectures and 3 hours of laboratory per week. PRQ: CHEM 440.

425. ANALYTICAL CHEMISTRY II (4). Fundamentals of physico-chemical techniques of chemical analysis focusing on spectrometric and electrochemical techniques. Fundamentals, instrumentation, and applications of optical and mass molecular and atomic spectrometries, and electrochemical methods. Three hours of lecture and one 4-hour laboratory period a week. PRQ: CHEM 325 and CHEM 440, or consent of department.

435. PHYSICAL METHODS IN ORGANIC CHEMISTRY (3). Application of spectroscopic techniques to the determination of organic structures. PRQ: Senior standing and CHEM 440.

440. PHYSICAL CHEMISTRY I (3). Study of the gaseous, liquid, and solid states; thermodynamics; chemical equilibrium; kinetic theory. Three lectures a week plus a recitation section. PRQ: CHEM 211T and CHEM 213, MATH 230, and PHYS 211 or PHYS 273.

441. PHYSICAL CHEMISTRY II (3). Atomic and molecular structure, spectroscopy; kinetics, chemical statistics. Three lectures a week plus a recitation section. PRQ: CHEM 440 and either MATH 232 or MATH 336.

446. THEORETICAL CHEMISTRY (3). Continuation of CHEM 440 and CHEM 441. Atomic structure, chemical bonding, and introduction to elementary quantum mechanics. Three lectures a week. PRQ: CHEM 441.

447. PHYSICAL CHEMISTRY LABORATORY (3). Modern experimental techniques and underlying theoretical principles for thermodynamics, chemical kinetics, spectroscopy, and molecular structure. Introduction to computer methods in physical chemistry. Two lectures and one 4-hour laboratory period a week. PRQ: CHEM 440.

460. INORGANIC CHEMISTRY II (3). Introduction to bonding and structure of transition metal complexes. Descriptive chemistry of the first row transition elements including reactions, structures, electronic spectra, and magnetic properties. Selected topics from the heavy transition elements, the lanthanides and the actinides. Three lectures per week. PRQ: CHEM 325, CHEM 337, and CHEM 440, or consent of department.

461. INORGANIC CHEMISTRY LABORATORY (1). Microscale synthesis and characterization of compounds of both main group elements and transition elements. Experimental examination of magnetic and spectroscopic properties of inorganic complexes. Use of glovebox techniques in the handling of air-sensitive materials. One 4-hour laboratory per week. PRQ: CHEM 332 or CHEM 339 or consent of department. PRQ or CRQ: CHEM 460 or consent of department.

463. INORGANIC CHEMISTRY III (3). Chemical applications of group theory including vibrational spectra, molecular orbitals and ligand field theory. Theoretical basis for physical methods in inorganic chemistry. Selected topics in modern structural inorganic chemistry: organometallic compounds, cluster compounds including rings and polymers, and bioinorganic chemistry. Three lectures a week. PRQ: CHEM 460.

470. GENERAL BIOLOGICAL CHEMISTRY (3). *Crosslisted as BIOS 470X.* Overall view of biochemistry including structure, properties, function, and metabolism of biologically important compounds. PRQ: CHEM 331 or CHEM 337.

471. BIOLOGICAL CHEMISTRY LABORATORY (3). *Crosslisted as BIOS 471X.* Experiments in the isolation, purification, and characterization of biomolecules by chromatographic, electrophoretic, and centrifugation techniques; enzyme kinetics; electron transport in mitochondria and microsomes. One lecture and two 3-hour laboratory periods per week. PRQ: CHEM 325. CRQ: CHEM 470 or CHEM 472.

472. BIOLOGICAL CHEMISTRY I (3). *Crosslisted as BIOS 472X*. Detailed study of the structure and properties of proteins, carbohydrates, lipids, and nucleic acids. Properties of enzymes. Bioenergetics including oxidative phosphorylation and photosynthesis. PRQ: CHEM 331 or CHEM 337.

473. BIOLOGICAL CHEMISTRY II (3). *Crosslisted as BIOS 473X*. Detailed study of the metabolism of carbohydrates, lipids, and nitrogenous compounds, including proteins and nucleic acids. Metabolic regulation. Genetic information. PRQ: CHEM 472 or BIOS 472X or consent of department.

490X. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as BIOS 484X, GEOL 475, and PHYS 490X.* Examination of major concepts of science and how they evolved. Comparison and contrast of the role and practice of science in various cultures and examination of the interaction between science, technology, and culture. PRQ: Junior standing or consent of department.

493X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY EDUCATION (3). *Crosslisted as BIOS 402X, GEOL 483, and PHYS 493X.* Methods and theory for the teaching of interdisciplinary science in grades 6-12. Exploration of the nature and purpose of science and its underlying assumptions, the social and cultural challenges in science teaching, and the potential solutions to these challenges through research, discussion, and reflection. Use of state and national science standards to develop student learning objectives and to design inquiry-based lesson plans, micro-teaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio. PRQ: Consent of department.

494. USE OF TECHNOLOGY IN CURRICULUM DEVELOPMENT AND CHEMISTRY TEACHING (3). Use of web-based teaming technology to track, design, and implement new science curricula. Includes use of SharePoint to collaboratively develop a standards-aligned instructional module on the web as part of a three-semester project including ILAS 300 and/or ILAS 401, and CHEM 497. PRQ: Consent of department. CRQ: CHEM 301X and ILAS 301.

495X. TEACHING OF PHYSICAL SCIENCES (3). *Crosslisted as PHYS 495*. Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula; classroom and laboratory organization; microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; methods of evaluation. PRQ: Consent of department. CRQ: ILAS 401.

496. TRANSITION TO THE PROFESSIONAL CHEMISTRY TEACHER (1). A transitioning experience in which the certification candidate achieves closure on the initial phase of professional preparation and, upon that foundation, charts a path for continuing professional growth as a practicing teacher. The candidate reflects on the preparatory experience and provides complete documentation demonstrating ability to perform as a qualified chemistry teacher. Such documentation must include, but not be limited to, the electronic portfolio, a professional development plan, and a resume. CRQ: CHEM 497 or consent of department.

497. STUDENT TEACHING (SECONDARY) IN CHEMISTRY/ PHYSICAL SCIENCES (7 to 12). Student teaching for 10 weeks or for one semester. Assignments to be arranged with the College of Liberal Arts and Sciences coordinator of teacher certification after approval by the Department of Chemistry and Biochemistry. Not available for credit in the major. PRQ: CHEM 495X and consent of department.

498. RESEARCH (1 to 6). Individual study of a problem in experimental work or theory. Includes instruction in the use of the chemical literature and the delivery of research presentations. May be repeated to a maximum of 12 semester hours. Written report required each semester. PRQ: Consent of department.

499H. RESEARCH (1 to 3). Same as CHEM 498, but for honors students.

Chemistry and Biochemistry Faculty

Gary M. Baker, Ph.D., Purdue University, associate professor
David S. Ballantine, Jr., Ph.D., University of Maryland, associate professor
Rathindra N. Bose, Ph.D., Georgetown University, professor
Jon W. Carnahan, Ph.D., University of Cincinnati, professor
Robert F. Cunico, Ph.D. Purdue University, professor emeritus
James E. Erman, Ph.D., Massachusetts Institute of Technology, Distinguished Research Professor, emeritus
Elizabeth R. Gaillard, Ph.D., University of Texas, associate professor
Thomas M. Gilbert, Ph.D., University of California, Berkeley, associate professor
Stephen K. Gray, Ph.D., University of California, Berkeley, adjunct associate professor
Heike Hofstetter, Ph.D., University of Tübingen, adjunct associate professor
Oliver Hofstetter, Ph.D., University of Tübingen, assistant professor
Narayan S. Hosmane, Ph.D., Edinburgh University, Distinguished Research Professor
Douglas Klumpp, Ph.D., Iowa State University, associate professor
Chhiu-Tsu Lin, Ph.D., University of California, Los Angeles, Distinguished Teaching Professor
John L. A. Mitchell, Ph.D., Princeton University, Distinguished Research Professor
Victor V. Ryzhov, Ph.D., Case Western Reserve University, associate professor
Lee Sunderlin, Ph.D., University of California, Berkeley, associate professor
Petr Vanýsek, Ph.D., Czechoslovak Academy of Sciences, associate professor
Lidia B. Vitello, Ph.D., Clarkson College of Technology, adjunct associate professor
Qingwei Yao, Ph.D., University of Illinois, Chicago, associate professor
Chong Zheng, Ph.D., Cornell University, professor

Department of Communication (COMS, JOUR)

Admission to the major in communication studies in the Department of Communication is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Communication offers both a B.A. degree and a B.S. degree for majors in communication studies and in journalism. Students may pursue a double major in communication studies and journalism or a major in one area and a minor in the other. Further, communication studies majors can pursue emphases 1 and 2 or emphases 2 and 3.

In addition, the department offers courses of study leading to a minor in communication studies, which can be tailored to meet a variety of interests including teacher certification; a minor in journalism; and an interdisciplinary minor in applied communication which is offered jointly with the Department of English. Several of the department's lower-division courses can be used by non-majors toward fulfilling area requirements in the university's general education program.

Internship opportunities are available for academic credit and/or transcript recognition for both communication studies and journalism students in related areas such as advertising, sales, promotions, human resources, special events, public relations, writing/editing, creative/technical production, web design, graphic design, broadcasting, marketing, education, politics, newspaper/management, photojournalism, film, consulting, training, and public speaking. Interested students should consult with the departmental director/coordinator of internships.

Certain communication studies courses are also offered for the interdisciplinary minors in applied communication, international studies, linguistics, public administration, and women's studies.

In no case does the Department of Communication allow a course to count twice in any double major, double emphasis, or major-minor combination.

Major in Communication Studies (B.A. or B.S.)

Three emphases are available to students majoring in communication studies. The emphasis in communication, culture, and advocacy offers courses in theory, practice, and criticism appropriate for study in the general field of human communication. The emphasis in media studies combines courses in general communication with courses in mass communication theory, history, criticism, and production. The emphasis in organizational/corporate communication combines a common core of courses in communication with courses which examine communication systems, training, and consulting, as well as advertising, and corporate advocacy in business, community, and governmental organizations.

Under no circumstances will the Department of Communication accept more than 18 semester hours of transfer credit for application to the major in communication studies at NIU.

Every communication studies major is required to complete satisfactorily a senior project while enrolled in COMS 495A or COMS 495B.

Emphasis 1. Communication, Culture, and Advocacy

Requirements in Department (38)

COMS 200 - Public Speaking (3),
  OR COMS 300 - Speech Writing (3),
  OR COMS 305 - Argumentation and Debate (3),
  OR COMS 309 - Performance in Speech Communication (3),
  OR COMS 361 - Business and Professional Communication (3)
COMS 252 - Introduction to Communication Studies (3)
COMS 400 - Rhetorical Theory (3)
COMS 401 - Criticism of Public Rhetoric (3),
  OR COMS 419 - Political Communication in America (3),
  OR COMS 496R - Special Topics in Rhetoric (3)
COMS 403 - Freedom of Speech and Communication Ethics (3),
  OR COMS 455 - Media Law and Ethics (3),
  OR JOUR 480 - Journalism Law and Regulation (3)
COMS 404 - Communication Theories (3)
COMS 407 - Practicum (1)
COMS 495A - Capstone Project: Senior Thesis (1),
  OR COMS 495B - Capstone Project: Senior Portfolio (1)
Two of the Following (6)
  COMS 200[1] - Public Speaking (3)
  COMS 201 - Group Discussion Skills (3)
  COMS 203 - Interpersonal Communication Skills (3)
  COMS 300[1] - Speech Writing (3)
  COMS 305[1] - Argumentation and Debate (3)
  COMS 309[1] - Performance in Speech Communication (3)
  COMS 355 - Media Writing (3)
  COMS 357 - Introduction to Studio Production (3)
  COMS 361[1] - Business and Professional Communication (3)
  JOUR 200A or JOUR 200B - Basic News Writing (3)
  JOUR 312 - Graphics of Communications (3)
Three of the Following (9)
  COMS 304 - Introduction to Persuasion Theory (3)
  COMS 362 - Intercultural Communication (3)
  COMS 401[1] - Criticism of Public Rhetoric (3)
  COMS 402 - Group Communication (3)
  COMS 405 - Advanced Interpersonal Communication (3)
  COMS 410 - Communication and Gender (3)
  COMS 419[1] - Political Communication in America (3)
  COMS 460 - Broadcasting Theory and Criticism (3)
  COMS 462 - Film Theory and Criticism (3)
  COMS 465 - Computer-Mediated Communication (3)
  COMS 480 - Communication and Conflict Management (3)
  COMS 491 - Methods of Research in Communication (3)
  COMS 496C - Special Topics in Communication Theory (3)
  COMS 496M - Special Topics in Media Studies (3)
  COMS 496R[1] - Special Topics in Rhetoric (3)
  JOUR 483 - Mass Media in Modern Society (3)
Electives from communication studies courses numbered 200 and above (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree
Fulfillment of B.A. foreign language requirement (0-12)
  (See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
Mathematics/laboratory science sequence (10-15)
  (See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 1, Communication, Culture, and Advocacy: 38-50 (B.A.) OR 48-53 (B.S.)

[1] If not used to fulfill requirement above.

Emphasis 2. Media Studies

Requirements in Department (38)

COMS 251 - Introduction to Media Studies (3)
COMS 252 - Introduction to Communication Studies (3)
COMS 355 - Media Writing (3)
COMS 356 - Critical Interpretation of Film/Television (3)
COMS 357 - Introduction to Studio Production (3),
  OR COMS 358 - Introduction to Field Production (3)
COMS 407 - Practicum (1)
COMS 455 - Media Law and Ethics (3),
  OR COMS 403 - Freedom of Speech and Communication Ethics (3),
  OR JOUR 480 - Journalism Law and Regulation (3)
COMS 495A - Capstone Project: Senior Thesis (1),
  OR COMS 495B - Capstone Project: Senior Portfolio (1)
Six courses from the following in consultation with adviser (18)
  Of these 18 semester hours, no more than 9 may be at the 300 level, and no more than 6 may be in JOUR courses. Students should choose additional courses up to the limit of 50 semester hours in the major which will enhance their own program. Profiles of suggested courses of study are available for students interested in corporate video production, corporate interactive video, broadcast production, and cultural studies.

  COMS 309 - Performance in Speech Communication (3)
  COMS 357[1] - Introduction to Studio Production (3)
  COMS 358[1] - Introduction to Field Production (3)
  COMS 359 - Interactive Media Production I (3)
  COMS 364X - Television News Producing and Directing (3)
  COMS 370 - Principles of Advertising (3)
  COMS 380 - Corporate Advocacy and Issue Management (3)
  COMS 419 - Political Communication in America (3)
  COMS 426A - Advanced Field Production: Documentary (3)
  COMS 426B - Advanced Field Production: Narrative (3)
  COMS 436 - Advanced Post Production (3)
  COMS 446 - Designing for the Internet (3)
  COMS 449 - Audio Production (3)
  COMS 454 - Transnational Communication and Media (3)
  COMS 456C - History of Film Before 1950
  COMS 456D - History of Film After 1950
  COMS 457 - The Documentary Tradition (3)
  COMS 459 - History of Broadcasting (3)
  COMS 460 - Broadcasting Theory and Criticism (3)
  COMS 462 - Film Theory and Criticism (3)
  COMS 463 - Advanced Studio Production (3)
  COMS 465 - Computer-Mediated Communication (3)
  COMS 466 - Narrative Scriptwriting (3)
  COMS 467 - Corporate Scriptwriting (3)
  COMS 469 - Interactive Media Production II (3)
  COMS 470 - Campaign Strategies and Development (3)
  COMS 491 - Methods of Research in Communication (3)
  COMS 496M - Special Topics in Media Studies (3)
  COMS 497 - Internship (3)
  COMS 498A - Tutorial: Non Production (1-3)
  COMS 498B - Tutorial: Media Production (1-3)
  JOUR 335 - Principles of Public Relations (3)
  JOUR 354 - Fundamentals of Broadcast News (3)
  JOUR 435 - Advanced Public Relations (3)
  JOUR 449 - Media Management (3)
  JOUR 483 - Mass Media in Modern Society (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree
Fulfillment of B.A. foreign language requirement (0-12)
  (See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
Mathematics/laboratory science sequence (10-15)
  (See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 2, Media Studies: 38-50 (B.A.) OR 48-53 (B.S.)

Emphasis 3. Organizational/Corporate Communication

Requirements in Department (42)

COMS 195 - Planning Your Communication Career and Life's Path (1)
COMS 200 - Public Speaking (3),
  OR COMS 300 - Speech Writing (3),
  OR COMS 305 - Argumentation and Debate (3),
  OR COMS 309 - Performance in Speech Communication (3),
  OR COMS 361 - Business and Professional Communication (3)
COMS 252 - Introduction to Communication Studies (3)
COMS 302 - Introduction to Organizational Communication Theory (3)
COMS 303 - Introduction to Interpersonal Communcation Theory (3)
COMS 304 - Introduction to Persuasion Theory (3)
COMS 370 - Principles of Advertising (3),
  OR COMS 380 - Corporate Advocacy and Issue Management (3),
  OR COMS 461B - Organizational Communication: External (3),
  OR COMS 496D - Special Topics in Persuasion and Social Influence (3),
  OR JOUR 335 - Principles of Public Relations (3)
COMS 400 - Rhetorical Theory (3),
  OR COMS 401 - Criticism of Public Rhetoric (3),
  OR COMS 419 - Political Communication in America (3),
  OR COMS 496R - Special Topics in Rhetoric (3)
COMS 402 - Group Communication (3),
  OR COMS 405 - Advanced Interpersonal Communication (3),
  OR COMS 410 - Communication and Gender (3),
  OR COMS 461A - Organizational Communication: Internal (3),
  OR COMS 480 - Communication and Conflict Management (3),
  OR COMS 496A - Special Topics in Interpersonal Communication and Personal Relationships (1)
COMS 403 - Freedom of Speech and Communication Ethics (3),
  OR COMS 455 - Media Law and Ethics (3),
  OR JOUR 480 - Journalism Law and Regulation (3)
COMS 404 - Communication Theories (3),
  OR COMS 491 - Methods of Research in Communication (3)
COMS 407 - Practicum (1)
COMS 495A - Capstone Project: Senior Thesis (1),
  OR COMS 495B - Capstone Project: Senior Portfolio (1)
COMS 497 - Internship (3),
  OR COMS 498A Tutorial: Non Production (3) OR 498B Tutorial: Media Production (3)
Electives from COMS courses numbered 300 and above (3)
Electives from COMS courses numbered 400 and above (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree
Fulfillment of B.A. foreign language requirement (0-12)
  (See "Foreign Language Requirement for the B.A. Degree.")

For the B.S. degree
Mathematics/laboratory science sequence (10-15)
  (See "College Requirement for the B.S. Degree.")

Total Hours for Emphasis 3, Organizational/Corporate Communication: 42-54 (B.A.) OR 52-57 (B.S.)

Recommendations

See departmental adviser for recommended courses in areas such as economics, English, journalism, management, marketing, political science, psychology, and sociology.

[1] If not used to fulfill requirement above.

Degree with Honors

The degree with honors will be awarded to majors who have a cumulative GPA of at least 3.30 and a 3.50 GPA or above in communication studies and have, in their senior year, successfully completed 7 semester hours of communication studies honors work culminating in an approved senior thesis. The 7 semester hours of honors work shall consist of a capstone-designated course and COMS 498H taken over two semesters of the senior year, and COMS 495AH.

Details concerning application for a degree with honors in communication studies can be obtained from the department's undergraduate studies director.

Major in Journalism (B.A. or B.S.)

The non-journalism requirements comply with standards of the Accrediting Council on Education in Journalism and Mass Communications. Students may select courses to focus on broadcast news, newspaper-magazine print journalism, photojournalism, or public relations.

Requirements in Department (30)

JOUR 200A or JOUR 200B - Basic News Writing (3)
JOUR 449 - Media Management (3)
JOUR 480 - Journalism Law and Regulation (3)
One of the Following (3)
- JOUR 302 - News Reporting (3)
- JOUR 315 - Press Photography (3)
- JOUR 335 - Principles of Public Relations (3)
- JOUR 354 - Fundamentals of Broadcast News (3)

One of the Following (3)
- JOUR 301 - Article Writing (3)
- JOUR 355 - Television Newswriting and Reporting (3)
- JOUR 360 - Public Relations Writing (3)
- JOUR 401 - Editorial and Opinion Writing (3)

One of the Following (3)
- JOUR 357 - Advanced Practices in Television News (3)
- JOUR 402 - Advanced Reporting (3)
- JOUR 415 - Advanced Photojournalism (3)
- JOUR 435 - Advanced Public Relations (3)

One of the Following (3)
- JOUR 312 - Graphics of Communications (3)
- JOUR 356 - Electronic News Gathering and Editing (3)
- JOUR 410 - News Editing (3)
- JOUR 416 - Photograph Editing (3)
- JOUR 461 - Specialized Press Editing (3)

One of the Following (3)
- JOUR 481 - History of Journalism (3)
- JOUR 482 - International News Communications (3)
- JOUR 483 - Mass Media in Modern Society (3)

Electives from other journalism courses or courses not selected from above (6)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
Mathematics/laboratory science sequence (10-15)
(See "College Requirement for the B.S. Degree")

Total Hours for Major in Journalism: 30-42 (B.A.) OR 40-45 (B.S.)

Special Requirements

At least 90 semester hours of the total hours required for the baccalaureate degree must be taken in subjects other than journalism, with at least 65 of those hours in the liberal arts. The department currently considers liberal arts courses to be most of the courses offered in the College of Liberal Arts and Sciences and courses in art history and appreciation, music history and literature, and theater history and criticism. Students considering courses in communication studies or computer science should consult a department adviser to determine whether the courses can be included in the liberal arts category.

Students must also fulfill the requirements of a minor or a second major, which must be selected in consultation with a department adviser. Since disciplinary academic standards limit the number of professional courses that journalism majors may take, students thinking of including major or minor work in communication studies (with courses, for example, in media studies or organizational/corporate communication) are particularly urged to see a department adviser before proceeding.

Journalism majors must earn a grade of C or better in all required journalism courses. Journalism prerequisites are deemed to be met only by obtaining a grade of C or better. It is necessary to repeat a journalism course in which a grade below C is earned before taking any course for which it is a prerequisite.

A student's program of courses must be designed in consultation with, and periodically reviewed by, a department adviser.

Recommendations

Students interested in international affairs are advised to develop a high degree of competence in one or more foreign languages, to become familiar with political systems other than that found in the United States, to take JOUR 482, International News Communications, and to enroll in the interdisciplinary international studies minor. Students interested in ethnic studies are advised to take JOUR 490, Ethnic Minorities and the News Media, and to enroll in a minor such as black studies, Latino/Latin American studies, or Southeast Asian studies.

The following courses are recommended for all journalism majors and students are advised to include at least four of them among their elective courses.

*ECON 261 - Principles of Macroeconomics (3)
MKTG 310 - Principles of Marketing (3)
POLS 303 - Local Government and Politics (3)
POLS 305 - Political Parties and Elections (3)
*PSYC 102 - Introduction to Psychology (3)
*SOCI 170 - Introduction to Sociology (3)

Degree with Honors

The degrees B.A. and B.S. with honors in journalism will be awarded to students who complete all degree and major requirements and who also complete JOUR 496H, Journalism Honors Seminar, with a grade of at least B. Students are eligible to register for JOUR 496H if they have at least 90 semester hours of credit, a minimum GPA of 3.25 in all work, a minimum GPA in journalism courses of 3.25, and the consent of the department.

Minor in Communication Studies

No more than 6 hours of transfer credit will be accepted for credit toward the minor in communication studies at NIU.

Option 1. Communication Studies (18)

Students may pursue a minor in the field of communication studies by successfully completing 18 semester hours from among the department's course offerings numbered 200 or above, no more than 6 hours of which are in 200-level courses.

Because of the wide range of fields that are appropriate as areas of study, including film studies, public communication, media studies, media production, and communication studies, students are encouraged to secure information about these areas from the department.

* Available for general education credit.

Twelve or more semester hours in this option for the minor in communication studies must be taken at NIU.

Option 2. Communication Education (24)

Students wishing to teach speech communication at the secondary level must have a declaration of minor in communication studies filed and approved, earn a grade of C or better in all communication courses in the minor, and successfully complete all of the requirements for initial teacher certification in another field of study. See list of initial teacher certification programs in the "Teacher Certification Requirements" section of this catalog. It is strongly recommended that the initial certification be in English.

COMS 100 - Fundamentals of Oral Communication (3)
Five of the following (15)
- COMS 200 - Public Speaking (3)
- COMS 201 - Group Discussion Skills (3)
- COMS 203 - Interpersonal Communication Skills (3)
- COMS 304 - Introduction to Persuasion Theory (3)
- COMS 305 - Argumentation and Debate (3)
- COMS 309 - Performance in Speech Communication (3)
- COMS 361 - Business and Professional Communication (3)

English rhetoric and composition course work (6)

Students completing the above requirements, who also are recommended by the NIU certification officer for initial teacher certification in another field of study or who already possess a valid secondary teacher certificate (6-12), will have met the state's requirements for endorsement to teach speech communication at the secondary level.

Eighteen or more semester hours in this option for the minor in communication studies must be taken at NIU.

Minor in Journalism (18)

Journalism minors must earn a grade of C or better in all required journalism courses in their minor. Journalism prerequisites are deemed to be met only by obtaining a grade of C or better. (It is necessary to repeat a journalism course in which a grade below C is earned, before taking any course for which it is a prerequisite.)

JOUR 200A or JOUR 200B - Basic News Writing (3)
JOUR 480 - Journalism Law and Regulation (3)
One of the Following (3)
- JOUR 302 - News Reporting (3)
- JOUR 315 - Press Photography (3)
- JOUR 335 - Principles of Public Relations (3)
- JOUR 354 - Fundamentals of Broadcast News (3)

One of the Following (3)
- JOUR 301 - Article Writing (3)
- JOUR 355 - Television Newswriting and Reporting (3)
- JOUR 360 - Public Relations Writing (3)
- JOUR 401 - Editorial and Opinion Writing (3)

One of the Following (3)
- JOUR 357 - Advanced Practices in Television News (3)
- JOUR 402 - Advanced Reporting (3)
- JOUR 415 - Advanced Photojournalism (3)
- JOUR 435 - Advanced Public Relations (3)

One of the Following (3)
- JOUR 312 - Graphics of Communications (3)
- JOUR 356 - Electronic News Gathering and Editing (3)
- JOUR 410 - News Editing (3)
- JOUR 416 - Photograph Editing (3)
- JOUR 461 - Specialized Press Editing (3)

Six or more semester hours in the minor must be taken at NIU.

Course List

Communication Studies (COMS)

100. FUNDAMENTALS OF ORAL COMMUNICATION (3). Listening and speaking competencies with focus on skills of invention, organization, language and style, and delivery in public and other settings. Does not count for credit toward the major in communication studies.

195. PLANNING YOUR COMMUNICATION CAREER AND LIFE'S PATH (1). Explores programs of study available for communication majors for their future careers within a liberal arts and sciences framework and results in a plan of study for each student. Not available to those with senior standing.

200. PUBLIC SPEAKING (3). Training in the preparation and delivery of informative, entertaining, and persuasive speeches. Sources of material, patterns of organization, and the extemporaneous and composite methods of presentation. Application of psychological principles in adapting to audience situations. PRQ: COMS 100.

201. GROUP DISCUSSION SKILLS (3). Principles and aims of discussion, sources and organization of material; study of the logical processes of reasoning. Opportunity for discussion of contemporary problems in problem-solving groups. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail.

203. INTERPERSONAL COMMUNICATION SKILLS (3). Promotes the study, development, and practice of basic interpersonal and relational skills for effective personal relationships in private and public spheres. Because a significant portion of the course grade is based on student cooperative projects, this course cannot be taken pass/fail.

220. RHETORIC AND PUBLIC ISSUES (3). Role of public discourse and persuasive campaigns in selecting, structuring, and presenting versions of reality. Nature and impact of rhetoric in public controversy. Emphasis on rhetorical criticism of advocacy on controversial matters of public policy through critical analysis of speeches, debates, editorials, argumentative essays, and political and social changes. Not available for credit to students with credit in COMS 210.

230. RHETORIC AND THE MEDIA (3). Role of media messages in selecting, structuring, and presenting versions of reality. Effects on individuals and society. Not available for credit to students with credit in COMS 151.

240. RHETORIC OF INTERPERSONAL COMMUNICATION (3). How interpersonal communication constructs our sense of self, determines the quality of enduring relationships with family, colleagues, and friends, and influences decisions about social responsibility and action.

251. INTRODUCTION TO MEDIA STUDIES (3). Focus on theoretical contexts, research methodologies, technologies, analytical perspectives, and historical backgrounds which define the field of media studies. Emphasis on non-print media.

252. INTRODUCTION TO COMMUNICATION STUDIES (3). Comprehensive survey of theoretical contexts, critical and analytical perspectives, research methodologies, and historical backgrounds which define the field of communication studies.

300. SPEECH WRITING (3). Preparation, revision, and presentation of manuscripts with particular attention to developing and organizing ideas and to clarity and language. Emphasis on speeches for organizations, public affairs, and radio-television. PRQ: COMS 100.

302. INTRODUCTION TO ORGANIZATIONAL COMMUNICATION THEORY (3). Theoretical examination of the development of organizational communication within a global framework as a foundation for more advanced coursework. Encourages a multi-layered consideration of the ethics of organizations' communication practices. Not available for credit to students with prior credit in COMS 461, COMS 461A, or COMS 461B.

303. INTRODUCTION TO INTERPERSONAL COMMUNCATION THEORY (3). Studies the theoretical bases of the formation, development, maintenance, and termination of personal relationships

in the common private and public contexts. Considers verbal and nonverbal communication practices within these theoretical frameworks that facilitate and hinder the development of effective interpersonal relationships. Not available for credit to students with prior credit in COMS 405.

304. INTRODUCTION TO PERSUASION THEORY (3). Basic theories of persuasion and their application to typical communicative situations and problems in today's society.

305. ARGUMENTATION AND DEBATE (3). Examines the role of debate in a democratic society and aims to develop critical thinking and reasoned advocacy. To make functional a knowledge of the tests of evidence and the modes of logical reasoning, participation in various forms of debate is required. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail.

309. PERFORMANCE IN SPEECH COMMUNICATION (3). Multidimensional approach to oral communication. Emphasis on developing effective speech habits: voice production, voice quality, and articulation. Oral communication in speech performance for radio/television, teaching, and other professions where oral performance is particularly important. PRQ: COMS 100.

355. MEDIA WRITING (3). Writing for visual and aural presentation in the broadcast media with emphasis on program continuity, commercials, public service, and promotional campaigns.

356. CRITICAL INTERPRETATION OF FILM/TELEVISION (3). Influences of aesthetics, genre, mode of production, visual grammar, and individual artistic vision on the rhetorical interpretation of film. Selected masterpieces viewed and analyzed.

357. INTRODUCTION TO STUDIO PRODUCTION (3). Examination and application of principles of studio production, including articulation of visual and audio media, as well as an introduction to digital editing. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail.

358. INTRODUCTION TO FIELD PRODUCTION (3). Examination of basic theories and principles of video production in the field beginning with an understanding of visual aesthetics and image analysis. Application exercises include still photography, digital image manipulation, video production, and digital editing. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail.

359. INTERACTIVE MEDIA PRODUCTION I (3). Technologies and techniques of interactive and multimedia production. Critical readings of interactive media in both CD-ROM and web-page formats and practice in the production process, designing, writing, and producing interactive programs. Emphasis on content design for a variety of applications (i.e. entertainment, education, corporate communication) and platforms (Web page, CD-ROM, DVD-ROM).

361. BUSINESS AND PROFESSIONAL COMMUNICATION (3). Development of communication skills commonly used in governmental, corporate, and nonprofit agencies. Emphasis on report generation, information interviewing, and the presentation of proposals. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 100.

362. INTERCULTURAL COMMUNICATION (3). Focus in communicative interactions, patterns, and practices that lead to constructive and destructive consequences when disparate cultures come into close contact with one another.

364X. TELEVISION NEWS PRODUCING AND DIRECTING (3). *Crosslisted as JOUR 364.* Study and practice of television newscast production and direction in both scripted and unscripted formats, using digital and analog studio equipment and an Electronic News Room computer network. Focus on the special concepts, problems, and skills of airing TV news in an increasingly automated, technological environment. Explores centralization both of newscast production responsibilities and of newscast director and "line" producer roles. Students produce and direct "live" TV newscasts that air on DeKalb community Cable TV System. PRQ: COMS 357 or JOUR 357.

370. PRINCIPLES OF ADVERTISING (3). Communicative, persuasive, and social functions. Focus on advertising media, messages, strategies, creative planning, execution, and societal effects.

380. CORPORATE ADVOCACY AND ISSUE MANAGEMENT (3). Objectives, development, and implementation of campaigns of public information, image, and advocacy by corporations. Emphasis on corporate image creation, public issue debate, and corporate advocacy advertising.

400. RHETORICAL THEORY (3). Major trends and concepts developed through treatises and authors in the history of rhetorical theory from ancient Greece to the present. PRQ: COMS 252.

401. CRITICISM OF PUBLIC RHETORIC (3). Consideration of specific methods of rhetorical analysis and evaluation of public rhetoric representative of contemporary thought.

402. GROUP COMMUNICATION (3). Nature of group processes. Leadership, communication, and decision-making problems in small groups. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 303 or consent of department.

403. FREEDOM OF SPEECH AND COMMUNICATION ETHICS (3). Social responsibilities of the public and private oral communicator, as sender and receiver; issues of freedom of speech and exploration of problems of ethics in speech communication.

404. COMMUNICATION THEORIES (3). Role of spoken communication in social adaptation. Relationships among thought, language, and expression; verbal perception and cognition; communication models. PRQ: COMS 252.

405. ADVANCED INTERPERSONAL COMMUNICATION (3). Advanced examination and fundamental processes of interpersonal communication theory utilizing in-depth analyses or research projects. PRQ: COMS 303 or consent of department.

407. PRACTICUM (1 to 3). Experience in the cocurricular forensics and individual events programs, the classroom, organizational settings, research activities, and the media. May be taken for or repeated to a maximum of 3 semester hours. Majors, minors, and approved others only. S/U grading.

410. COMMUNICATION AND GENDER (3). Relationships among communication, gender, and culture through a variety of theoretical and critical perspectives. Examination of research on verbal and nonverbal aspects of communication as they interact with gender in contexts such as interpersonal, organizational, political, and media.

419. POLITICAL COMMUNICATION IN AMERICA (3). Communication theory and practices within the context of American politics. Modern campaigns, political communication consultants, issue definition and dissemination, communication strategies of administrative control, and communication within the presidency and within Congress. Special focus on the mass media.

426. ADVANCED FIELD PRODUCTION (3).
A. Documentary. PRQ: COMS 358 and COMS 457 and successful portfolio review or consent of department.
B. Narrative. PRQ: COMS 462 or COMS 456C or COMS 456D and successful portfolio review or consent of department.

Video production based on application of appropriate theories and aesthetics for documentary or narrative production. Projects utilize digital editing, audio track mixing, digital video camera(s), and locations as needed. Because a significant portion of the course grade is based on student collaborative work, this course cannot be taken pass/fail.

435X. ADVANCED PUBLIC RELATIONS (3). *Crosslisted as JOUR 435.* Analysis of public relations problems and procedures through use of case studies and other materials. Positions public relations practice and process within context of integrated marketing communication. PRQ: COMS 370 or COMS 380 or JOUR 335 and junior standing, or consent of department.

436. ADVANCED POST PRODUCTION (3). Aesthetics and techniques of digital nonlinear video editing including the aesthetics of continuity editing, montage editing and editing the narrative, as well as the techniques of nonlinear editing. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 357 or COMS 358, or consent of department.

446. DESIGNING FOR THE INTERNET (3). Conceptualization of appropriate design criteria for an attractive and efficient Internet site. Techniques for site construction. Appropriate software used for image

manipulation and page construction and design. Not open to B.F.A. studio art majors.

449. AUDIO PRODUCTION (3). Production of radio programs or other audio projects of a complex nature, emphasizing recording, editing, and mixing techniques. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 357 and successful portfolio review, or consent of department.

450X. INSTRUCTIONAL VIDEO I (3). *Crosslisted as ETT 450.* Practical methods for the production and use of video in educational settings. Preparation and presentation of televised instructional materials. Not open to students with credit in COMS 357 or COMS 358 or equivalent.

454. TRANSNATIONAL COMMUNICATION AND MEDIA (3). *Crosslisted as JOUR 454X.* Study of the development, structure, functions, and control of international communications media systems and activities as they affect world relations.

455. MEDIA LAW AND ETHICS (3). Development, structure, theory, and functions of legal controls and ethical constraints on media production and programming.

456. HISTORY OF FILM (3).
C. Before 1950
D. After 1950
Each topic may be taken once.

457. THE DOCUMENTARY TRADITION (3). Theories, techniques, history, and criticism of the documentary.

459. HISTORY OF BROADCASTING (3). *Crosslisted as JOUR 459X.* History of radio and television broadcasting in the United States from its inception to the present.

460. BROADCASTING THEORY AND CRITICISM (3). Major theoretical and critical perspectives for analysis of broadcasting.

461A. ORGANIZATIONAL COMMUNICATION: INTERNAL (3). Advanced analysis of contemporary practices of internal organizational communication from diverse disciplinary perspectives covered in COMS 302. Detailed examination of actual communication practices inside the organization. PRQ: COMS 302.

461B. ORGANIZATIONAL COMMUNICATION: EXTERNAL (3). Focus placed on communication in the contexts of advertising, marketing, public relations, sales, media relations, lobbying, and crisis management with special consideration of the ethical dimension. Examines the communication of an organization and its members with stakeholders such as clients, potential customers, suppliers, investors, or others experiencing some impact from the organization. PRQ: COMS 302.

462. FILM THEORY AND CRITICISM (3). Major theoretical and critical perspectives for analysis of film.

463. ADVANCED STUDIO PRODUCTION (3). Production of studio-based programs utilizing multiple cameras in a live or live-on-tape format. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 357 and successful portfolio review, or consent of department.

465. COMPUTER-MEDIATED COMMUNICATION (3). Critical investigation of computer-mediated communication technologies, including but not limited to the Internet, cyberspace, and virtual reality. Examination of economic, social, political, and philosophical aspects of technology as well as practical experience with computer-based communication and information systems.

466. NARRATIVE SCRIPTWRITING (3). Focus on structure, development, and execution of a 100-page narrative fiction script for media. Creativity, critical ability, and discipline in writing stressed. PRQ: COMS 355.

467. CORPORATE SCRIPTWRITING (3). Focus on scripting for nonbroadcast settings such as corporate training packages for management development or employee orientation; public service packages for social service agencies; and educational packages for such enterprises as medical agencies. Emphasis on client assessment, pre-production planning, writing for specific objectives, and script evaluation. PRQ: COMS 355.

469. INTERACTIVE MEDIA PRODUCTION II (3). Advanced technologies and techniques for creating Web-based interactive multimedia. Theories of media integration and interaction design, development of practical skills with Web-based production technologies beyond basic HTML (i.e., CSS, ASP, XML, Flash, and JavaScript), and creation of several interactive projects for e-commerce, education, and public service applications. PRQ: COMS 359 or consent of department.

470. CAMPAIGN STRATEGIES AND DEVELOPMENT (3). Development and presentation of public communication campaigns to include advertising, promotion, publicity, and corporate advocacy for business, public service, and political endeavors. Because a significant portion of the course grade is based on student team projects, this course cannot be taken pass/fail. PRQ: COMS 370 or COMS 380 or JOUR 335.

480. COMMUNICATION AND CONFLICT MANAGEMENT (3). Communication principles and techniques in relation to conflict management and negotiation; emphasis on interpersonal and organizational contexts.

491. METHODS OF RESEARCH IN COMMUNICATION (3). Research in communication with emphasis on qualitative (B.A. students) and quantitative (B.S. students) methodologies. Course requires a senior research paper and oral report. Computational, writing, and speaking skills will be assessed. PRQ: Junior standing and COMS 252.

495A. CAPSTONE PROJECT: SENIOR THESIS (1). Synthesis of theories, methods, and skills in the discipline of communication studies as exhibited through a thesis project in conjunction with departmentally designated capstone course. Majors only. PRQ: COMS 252 and senior standing.

495B. CAPSTONE PROJECT: SENIOR PORTFOLIO (1 to 3). Synthesis of theories, methods, and skills in the discipline of communication studies as exhibited through a portfolio produced under faculty supervision. No more than 1 semester hour may be included in the major. Majors only. PRQ: COMS 252 and senior standing.

496A. SPECIAL TOPICS IN INTERPERSONAL COMMUNICATION AND PERSONAL RELATIONSHIPS (1 to 3). May be repeated to a maximum of 6 hours when topic varies. ; PRQ: COMS 303.

496B. SPECIAL TOPICS IN ORGANIZATIONAL COMMUNICATION (1 to 3). May be repeated to a maximum of 6 hours when topic varies; PRQ: COMS 302.

496C. SPECIAL TOPICS IN COMMUNICATION THEORY (1 to 3). May be repeated to a maximum of 6 semester hours when topic varies.

496D. SPECIAL TOPICS IN PERSUASION AND SOCIAL INFLUENCE (1 to 3). May be repeated to a maximum of 6 hours when topic varies. PRQ: COMS 304.

496M. SPECIAL TOPICS IN MEDIA STUDIES (3). May be repeated to a maximum of 6 semester hours when topic varies.

496R. SPECIAL TOPICS IN RHETORIC (3). May be repeated to a maximum of 6 semester hours when topic varies.

497. INTERNSHIP(3 to 9). Junior and senior declared communication studies majors, minors, and approved others only. May be repeated. No more than 3 semester hours may be included in the major. No more than 6 semester hours may be included in the baccalaureate degree. Not available for credit to students having credit for ILAS 390. May not be taken concurrently with ILAS 390. S/U grading.

498. TUTORIAL (1 to 3).
A. Non Production
B. Media Production
Directed study and research. Each topic may be repeated to a maximum of 6 semester hours.

Journalism (JOUR)

150. INTRODUCTION TO MASS COMMUNICATION (3). Examination of the evolution and effects of mass communication, including television, radio, and newspapers. A critical perspective on functions and dysfunctions of mass media as social institutions, including effects on public morals, tastes, and issues.

200A. BASIC NEWS WRITING (3). Principles and practices of gathering, evaluating, and presenting information for mass audiences, with attention to print and electronic media. Covers a variety of news formats equally. Not available for credit to students with credit in JOUR 200 or JOUR 200B. PRQ: ENGL 104 or ENGL 105.

200B. BASIC NEWS WRITING (3). Principles and practices of gathering, evaluating, and presenting information for mass audiences, with attention to print and electronic media. Covers a variety of news formats stressing radio/TV news. Not available for credit to students with credit in JOUR 200 or JOUR 200A. PRQ: ENGL 104 or ENGL 105.

301. ARTICLE WRITING (3). Practice in planning and writing features for newspaper and for other general, class and trade publications. Feature story markets. PRQ: JOUR 200 or JOUR 200A or JOUR 200B.

302. NEWS REPORTING (3). Experiences and practices in news gathering and reporting. Laboratory work based on live campus and community assignments. PRQ: JOUR 200 or JOUR 200A or JOUR 200B.

312. GRAPHICS OF COMMUNICATIONS (3). Introduction to typography and page design. Design of logos, columns, newsletters, flyers, magazines, posters, newspaper packages, and ads. Review of the history of various design practices with emphasis on accurate and ethical presentation of graphics and illustrations. PRQ: Sophomore standing.

315. PRESS PHOTOGRAPHY (3). Basic principles of photojournalism. Study of camera and darkroom techniques; the production of news, advertising and display pictures as they are used in various printed media; and photography law and ethics. Students are supplied with professional equipment. No previous experience required.

335. PRINCIPLES OF PUBLIC RELATIONS (3). Introduction to the fundamental principles and techniques of public relations, communication theories, and principles of human motivation and persuasion. PRQ: Sophomore standing.

340. COMMUNITY AND SUBURBAN NEWSPAPERS (3). Organization and operation of rural and suburban weekly newspapers, with emphasis on news, advertising, business, production, and circulation.

354. FUNDAMENTALS OF BROADCAST NEWS (3). Basic principles of reporting, writing, and scripting news for radio and television. Students write and report community news. Laboratory to be arranged. PRQ: JOUR 200 or JOUR 200A or JOUR 200B. CRQ: JOUR 356.

355. TELEVISION NEWSWRITING AND REPORTING (3). Study and practice of writing to videotape. Student experiences include field reporting with camera team, newscast anchoring, and producing reports for television newscasts. Laboratory arranged. PRQ: JOUR 354 and JOUR 356. CRQ: JOUR 357.

356. ELECTRONIC NEWS GATHERING AND EDITING (3). Study and practice of techniques employed in shooting and editing television news. Students cover assignments in the community and prepare stories for use in nightly TV newscasts. PRQ: JOUR 200 or JOUR 200A or JOUR 200B (or COMS 355 for COMS majors only). CRQ: JOUR 354.

357. ADVANCED PRACTICES IN TELEVISION NEWS (3). Study and practice of electronic newsgathering and reporting. Experiences include preparing on-camera field reports and newscast scripts, interviewing news figures, editing videotaped news reports, and anchoring newscasts. PRQ: JOUR 354 and JOUR 356. CRQ: JOUR 355.

360. PUBLIC RELATIONS WRITING (3). Theory and preparation of public relations materials such as news releases, features, media kits, interviews, and fact sheets. PRQ: JOUR 200 or JOUR 200A or JOUR 200B and JOUR 312 and JOUR 335.

364. TELEVISION NEWS PRODUCING AND DIRECTING (3). *Crosslisted as COMS 364X.* Study and practice of television newscast production and direction in both scripted and unscripted formats, using digital and analog studio equipment and an Electronic News Room computer network. Focus on the special concepts, problems, and skills of airing TV news in an increasingly automated, technological environment. Explores centralization both of newscast production responsibilities and of newscast director and "line" producer roles. Students produce and direct "live" TV newscasts that air on DeKalb community Cable TV System. PRQ: COMS 357 or JOUR 357.

401. EDITORIAL AND OPINION WRITING (3). Principles and practices of developing interpretative articles and series as well as editorials and opinion columns. Experience in carrying out research on current issues, in writing, and in evaluating the work of others. Examination of the opinion function of the mass media. PRQ: JOUR 200 or JOUR 200A or JOUR 200B.

402. ADVANCED REPORTING (3). Off-campus investigative news reporting, including reporting on taxes, the courts, religion, science, and on local stories with an international angle. Use of Internet to research census data and write census-based articles. PRQ: JOUR 302.

410. NEWS EDITING (3). Advanced practice in editing and headline construction for print media, and in newspaper and newsletter page design. PRQ: JOUR 200 or JOUR 200A or JOUR 200B.

415. ADVANCED PHOTOJOURNALISM (3). Advanced techniques of digital photography with emphasis on visual communication as employed in contemporary mass media. Students write, photograph, and edit. Color theory and ethical photo practice. PRQ: JOUR 315 or consent of department.

416. PHOTOGRAPH EDITING (3). Digital editing and layout of photographs. Selection of photographs from various electronic news sources and editing them for use as singles, spreads, and essays. History of newspaper and magazine design as well as the ethics of photographic selection, editing, and presentation. PRQ: JOUR 312 or consent of department.

435. ADVANCED PUBLIC RELATIONS (3). *Crosslisted as COMS 435X.* Analysis of public relations problems and procedures through use of case studies and other materials. Positions public relations practice and process within context of integrated marketing communication. PRQ: COMS 370 or COMS 380 or JOUR 335 and junior standing, or consent of department.

436. PUBLIC RELATIONS PROBLEMS (3). Investigation in depth of problems in public relations in a number of specialized areas, based on new developments, primary sources, and cases. Emphasis on individual investigation and oral and written reports with discussion. May be repeated to a maximum of 6 semester hours when topics vary. PRQ: JOUR 435.

449. MEDIA MANAGEMENT (3). Management of mass communications organizations, with emphasis on general administration, advertising, promotion, production, research, and planning. PRQ: Junior standing.

454X. TRANSNATIONAL COMMUNICATION AND MEDIA (3). *Crosslisted as COMS 454.* Study of the development, structure, functions and control of international communications media systems and activities as they affect world relations.

457. THE TELEVISION NEWS DOCUMENTARY (3). In-depth reporting on location of some aspect of the contemporary scene. Students investigate, prepare scripts, and shoot and edit documentaries to be used on television. Some traveling may be required. PRQ: JOUR 357 or consent of department.

459X. HISTORY OF BROADCASTING (3). *Crosslisted as COMS 459.* History of radio and television broadcasting in the United States from its inception to the present.

460. SPECIALIZED PRESS WRITING (3). Writing for specialized publications: research for articles, writing in the style of specialized publications, and the marketing of articles. Includes study of the specialized press. PRQ: JOUR 200 or JOUR 200A or JOUR 200B.

461. SPECIALIZED PRESS EDITING (3). Practical work in managing, planning, editing, and producing specialized publications. Includes reporting, copywriting, and picture editing. PRQ: JOUR 312.

471. TEACHING JOURNALISM: SUPERVISION OF SCHOOL PUBLICATIONS (3). Methods and materials for teaching journalism and supervising publications in secondary schools and junior colleges; courses of study; organization; attention to exceptional students; planning for multicultural classes and staffs; and production of publications. Includes 15 clock hours of clinical experience. PRQ: Junior standing or consent of department.

480. JOURNALISM LAW AND REGULATION (3). Law and regulation affecting the concept of freedom of the press, access to information, free press–fair trial, libel, privacy, copyright, access to the media, and legal concepts and restrictions related to the press, publishing, electronic media, photojournalism, and public relations. PRQ: Junior standing.

481. HISTORY OF JOURNALISM (3). Development of a free press from its origins in Europe through the emergence of modern journalism. Includes study of early newspapers, periodicals, and broadcast news programs. PRQ: Junior standing.

482. INTERNATIONAL NEWS COMMUNICATIONS (3). Survey of the news media and international affairs; foreign correspondence and coverage; international news agencies; and country-by-country historicalsocietal study of foreign journalism. PRQ: Junior standing.

483. MASS MEDIA IN MODERN SOCIETY (3). Concept and role of mass communications; rights, restrictions and responsibilities of the mass media; and interactions of mass communications and society. PRQ: Junior standing.

485. TOPICS IN JOURNALISM (1 to 3). In-depth study and discussion of current topics of special importance and interest in the field of journalism, including the background of the topics and their relationship to other fields. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Written permission from the faculty member coordinating the work.

490. ETHNIC MINORITIES AND THE NEWS MEDIA (3). Development of the press of various ethnic groups in the 19th and early 20th centuries, the needs it fulfilled, and its role in helping ethnic groups adjust to American society. The press of ethnic groups such as African Americans and Native Americans. PRQ: Junior standing.

492. INTERNSHIP IN JOURNALISM (3). Work experience for students planning to enter the field of mass communication. Students work for a semester or a summer as interns with appropriate organizations under the supervision and advisement of a department faculty coordinator. S/U grading.

495. DIRECTED INDIVIDUAL STUDY(1 to 4). May be repeated to a maximum of 4 hours. PRQ: Written permission from the faculty member with whom students are doing the work and the course coordinator.

496H. JOURNALISM HONORS SEMINAR (3). Seminar meetings and independent study for students pursuing the B.A. or B.S. degree with Honors in Journalism. Work culminates in honors paper or project. PRQ: Senior standing and minimum GPA of 3.25 in all work and in all journalism courses.

Communication Faculty

Communication Studies

Gretchen Bisplinghoff, Ph.D., Northwestern University, assistant professor
Robert Brookey, Ph.D., University of Minnesota, associate professor
Ferald J. Bryan, Ph.D., University of Missouri, associate professor
Gary Burns, Ph.D., Northwestern University, professor
Jeffrey P. Chown, Ph.D., University of Michigan, Presidential Teaching Professor
Arthur P. Doederlein, Ph.D., Northwestern University, assistant professor
David Gunkel, Ph.D., DePaul University, associate professor
Janice D. Hamlet, Ph.D., Ohio State University, associate professor
Kelly Happe, Ph.D., University of Pittsburgh, assistant professor
David Henningsen, Ph.D., University of Wisconsin, associate professor
Mary Lynn Henningsen, Ph.D., University of Wisconsin, assistant professor
Richard Holt, Ph.D., University of Illinois, associate professor
Betty LaFrance, Ph.D., Michigan State University, assistant professor
Mary S. Larson, Ed.D., Northern Illinois University, professor
Robert Miller, Ph.D., Northwestern University, associate professor
Steven M. Ralston, Ph.D., Indiana University, professor
Joseph Scudder, Ph.D., Indiana University, associate professor
Lois Self, Ph.D., University of Wisconsin, associate professor
Kathleen S. Valde, Ph.D., University of Iowa, associate professor
Laura Vazquez, Ph.D., Northwestern University, associate professor
Karen Whedbee, Ph.D., University of Wisconsin, assistant professor

Journalism

Walter Atkinson, Ph.D., University of Utah, assistant professor
Yu-Li Chang, Ph.D., Ohio University, assistant professor
Orayb Najjar, Ph.D., Indiana University, associate professor
Brian Thornton, Ph.D., University of Utah, associate professor
Dale Zacher, Ph.D., Ohio University, assistant professor

Department of Computer Science (CSCI)

Admission to the major in the Department of Computer Science is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Computer Science offers a program leading to the B.S. degree with a major in computer science. A student must choose an emphasis in general computer science, applied computer science, or theoretical computer science. Students planning to pursue graduate work at an institution other than NIU should choose the emphasis in theoretical computer science or include MATH 229, MATH 230, MATH 232, MATH 240, and STAT 350 in their program of study.

Students who intend to major or minor in computer science are requested to contact the departmental office during the early weeks of their first semester on campus to obtain additional information on admission to the computer science major or minor.

The department offers a course (CSCI 205) which partially fulfills the university's sciences requirement in the general education program and courses which count toward the College of Liberal Arts and Sciences' requirements for the B.S. degree.

Department Regulations

Computer science majors are not permitted to count courses in mathematical sciences (MATH/STAT) toward fulfilling general education area requirements. Also, students may not audit computer science courses without obtaining prior permission from the Department of Computer Science.

Major in Computer Science (B.S.)

Emphasis 1. General Computer Science

Requirements in Department (46)

CSCI 240 - Computer Programming in C++ (4)
CSCI 241 - Intermediate Programming in C++ (4)
CSCI 330 - The UNIX System (4)
CSCI 360 - Computer Programming in Assembler Language (4)
CSCI 463 - Computer Systems Organization (4)
CSCI 464 - Data Structures (4),
  OR CSCI 440 - Data Structures and Algorithm Analysis (4)
CSCI 465 - External Data Structures (4)
CSCI 466 - Database/Data Communications Software (4)
CSCI 467 - Systems Design and Analysis (4)
CSCI 468 - Systems Programming (4),
  OR CSCI 480 - Theoretical Operating Systems (4)
Two additional computer science courses numbered above CSCI 300 (6)

Requirements outside Department (9-12)

MATH 206 - Introductory Discrete Mathematics (3), and MATH 211 - Calculus for Business and Social Science (3),
  OR MATH 210 - Finite Mathematics (3), and MATH 211 - Calculus for Business and Social Science (3),
  OR MATH 229 and MATH 230 - Calculus I and II (8)
STAT 301 - Elementary Statistics (4),
  OR STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 1, General Computer Science: 55-58

Emphasis 2. Applied Computer Science

Requirements in Department (42)

CSCI 240 - Computer Programming in C++ (4)
CSCI 241 - Intermediate Programming in C++ (4)
CSCI 330 - The UNIX System (4)
CSCI 360 - Computer Programming in Assembler Language (4)
CSCI 440 - Data Structures and Algorithm Analysis (4),
  OR CSCI 464 - Data Structures (4)
CSCI 463 - Computer Systems Organization (4)
CSCI 465 - External Data Structures (4)
CSCI 466 - Database/Data Communications Software (4)
CSCI 467 - Systems Design and Analysis (4)
Two additional computer science courses numbered above CSCI 300 (6)

Requirements outside Department (19-21)

MATH 206 - Introductory Discrete Mathematics (3), and MATH 211 - Calculus for Business and Social Science (3),
  OR MATH 210 - Finite Mathematics (3), and MATH 211 - Calculus for Business and Social Science (3),
  OR MATH 229 and MATH 230 - Calculus I and II (8)
STAT 301 - Elementary Statistics (4),
  OR STAT 350 - Introduction to Probability and Statistics (3)
Three of the following (9)
  ACCY 288 - Fundamentals of Accounting (3)
  FINA 320 - Principles of Finance (3)
  MGMT 333 - Principles of Management (3)
  MKTG 310 - Principles of Marketing (3)

Total Hours for Emphasis 2, Applied Computer Science: 61-63

Emphasis 3. Theoretical Computer Science

Requirements in Department (41)

CSCI 230 - Computer Programming in FORTRAN (4)
CSCI 240 - Computer Programming in C++ (4)
CSCI 241 - Intermediate Programming in C++ (4)
CSCI 330 - The UNIX System (4)
CSCI 360 - Computer Programming in Assembler Language (4)
CSCI 462 - Introduction to the Foundations of Computer Science (3)
CSCI 463 - Computer Systems Organization (4)
CSCI 464 - Data Structures (4),
  OR CSCI 440 - Data Structures and Algorithm Analysis (4)
CSCI 468 - Systems Programming (4),
  OR CSCI 480 - Theoretical Operating Systems (4)
Two additional computer sciences courses numbered above CSCI 300 (6)

Requirements outside Department (29-30)

MATH 229, and MATH 230, and MATH 232 - Calculus I, II, and III (12)
MATH 240 - Linear Algebra and Applications (4)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)
STAT 350 - Introduction to Probability and Statistics (3)
Two of the following (6-7)
  MATH 434 (CSCI 434X) - Numerical Linear Algebra (3)
  MATH 435 (CSCI 435X) - Numerical Analysis (3)
  MATH 444 - Linear Programming and Network Flows (3)
  STAT 473 - Statistical Methods and Models I (3), and STAT 473A - Statistical Computing Packages (1)

Total Hours for Emphasis 3, Theoretical Computer Science: 70-71

* Available for general education credit.

Minor in Computer Science (19-23)

CSCI 240 - Computer Programming in C++ (4)
CSCI 241 - Intermediate Programming in C++ (4)
CSCI 330 - The UNIX System (4)
CSCI 360 - Computer Programming in Assembler Language (4)
One CSCI course numbered 400 or above (3-4)
MATH 110 - College Algebra (3), or satisfactory performance on the Mathematics Placement Examination

Six or more semester hours in the minor must be taken at NIU.

Course List

205. INTRODUCTION TO COMPUTING (3). Introduction to computers, computer science, and programming techniques. Not available for credit toward the major in computer science or for students with prior credit in CSCI 210, CSCI 230, CSCI 240, CSCI 250, or OMIS 259. PRQ: MATH 110 or consent of department.

210. ELEMENTARY PROGRAMMING (4). Laboratory course in computer programming using a major high-level computing language such as C and statistical packages such as SAS and SPSS. Not available for credit to students with prior credit in CSCI 230 or CSCI 240. PRQ: MATH 110 or consent of department.

215. VISUAL BASIC (4). Laboratory course in computer programming using Visual Basic. Not available for credit to students with prior credit in courses numbered above CSCI 465. PRQ: MATH 110, satisfactory performance on the Mathematics Placement Examination, or consent of department.

230. COMPUTER PROGRAMMING IN FORTRAN (4). In-depth laboratory course in computer programming using the FORTRAN language. Applications to mathematical problems in the physical sciences. Extensive laboratory work. PRQ: MATH 211 or MATH 229.

240. COMPUTER PROGRAMMING IN C++ (4). Emphasis on algorithm development and structured programming design and testing. Topics include input and output, decisions, loops, functions, arrays, text manipulation, files, and data abstraction. PRQ: MATH 110 or consent of department.

241. INTERMEDIATE PROGRAMMING IN C++ (4). A second course in programming techniques with emphasis on design and implementation of data structures applied to large-scale projects. Topics include static and dynamic implementation of linear and nonlinear data structures, recursion, searching and sorting algorithms, and algorithmic complexity analysis. PRQ: CSCI 240 or consent of department.

250. COMPUTER PROGRAMMING IN COBOL (4). A laboratory course in computer programming using the COBOL language. Emphasis on applications which require data management and the solution of problems involving evaluation of large amounts of data. Extensive laboratory work. Not available for credit to students with credit in CSCI 360. PRQ: MATH 110 or consent of department.

275. ELEMENTARY WEB DESIGN (3). Practical techniques for building web sites using HTML, CSS, and an integrated development environment. Aesthetic topics include designing an effective user interface with color, graphics, navigation, and layout. Not available for credit toward the major in computer science or for credit to students who have prior credit for COMS 359.

297. DIRECTED STUDY (1 to 3). Selected readings or projects to supplement lower-division CSCI courses. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

330. THE UNIX SYSTEM (4). In-depth laboratory course in the UNIX operating system. Applications to a wide variety of problems in computer science. Extensive laboratory work. PRQ: CSCI 230, CSCI 240, or CSCI 250.

360. COMPUTER PROGRAMMING IN ASSEMBLER LANGUAGE (4). In-depth study of assembler language programming on a third-generation computer, including internal and external subroutines, conditional assembly, and the macro language. Students required to write a number of substantial programs. Extensive laboratory work. PRQ: CSCI 230, CSCI 240, or CSCI 250.

390. INTERNSHIP (3). Work as an intern for a minimum of 20 hours per week in an off-campus agency. Reading and preparation of a paper under faculty supervision. May be repeated once. S/U grading. No more than 6 semester hours of internship and/or cooperative education credit can be counted toward NIU's required hours for graduation or toward NIU's 40 upper-division hour requirement. PRQ: Consent of department and CSCI 230 or CSCI 240.

434X. NUMERICAL LINEAR ALGEBRA (3). *Crosslisted as MATH 434.* Roundoff errors and computer arithmetic. Direct and iterative methods for solving linear systems; norms and condition numbers, iterative refinement. Linear least squares problems: the normal equations and QR approach for overdetermined systems. Numerical methods for eigenvalues: an introduction to the QR iteration. Extensive use of computers. PRQ: MATH 232, MATH 240, and CSCI 230, CSCI 240, or approved equivalent.

435X. NUMERICAL ANALYSIS (3). *Crosslisted as MATH 435.* Polynomial interpolation, numerical solutions of nonlinear equations, least squares approximation by polynomials, orthogonal polynomials, economization of power series. Numerical integration including quadrature formulae, adaptive quadrature, composite quadrature formulae, and Romberg integration. Numerical methods for initial value problems including Taylor series methods, Runge-Kutta methods, and multistep methods. The course makes extensive use of computers. PRQ: MATH 232, MATH 240, and CSCI 230, CSCI 240, or approved equivalent.

440. DATA STRUCTURES AND ALGORITHM ANALYSIS (4). Application of analysis and design techniques to nonnumeric algorithms acting on data structures. Utilization of algorithmic analysis and design criteria in the selection of methods for data manipulation. Computing projects done in a high-level computing language. Laboratory projects. PRQ: CSCI 241 and CSCI 360, or consent of department.

461. TECHNIQUES OF COMPUTER PROGRAMMING AND ALGORITHMIC PROCESSES (3). Advanced course in algorithmic processes and computer programming. A major higher-level language used in developing applications and the solutions of current problems. Knowledge of programming required. PRQ: Consent of department.

462. INTRODUCTION TO THE FOUNDATIONS OF COMPUTER SCIENCE (3). Introduction to mathematical languages, automata theory, and the theory of recursive functions and computability. Serves as a capstone course for the emphasis in theoretical computer science. PRQ: MATH 232 or MATH 240, and CSCI 230 or CSCI 240.

463. COMPUTER SYSTEMS ORGANIZATION (4). Organization and use of distributed computer systems. Basic concepts and examples from microcomputers and networks, peripheral components, data communications, and the organization of operating systems such as UNIX and DOS. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

464. DATA STRUCTURES (4). In-depth study of the theory and the programming techniques related to the storage and management of various forms of data. Programming assignments require an advanced understanding of assembler language. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

465. EXTERNAL DATA STRUCTURES (4). Formal organization of files, organization techniques using direct access, and indexed sequential and sequential files. COBOL topics, job control language, and access methods and utilities with applications to data processing. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

466. DATABASE/DATA COMMUNICATIONS SOFTWARE (4). Software development in a representative current database and an on-line interactive teleprocessing system. Extensive laboratory work. PRQ: CSCI 465 or consent of department.

467. SYSTEMS DESIGN AND ANALYSIS (4). Phases of the systems development life cycle and the tools used by the analyst in planning, specifying, and implementing a complex computer-based system. Related topics include documentation standards, interaction with users, and design of interfaces. Assignments include at least one

major group project. Serves as a capstone course for the emphases in general computer science and in applied computer science. PRQ: CSCI 465 or consent of department.

468. SYSTEMS PROGRAMMING (4). Detailed study of systems programming on a third-generation computer. Emphasis on the logical organization of the computer used. Extensive laboratory work. PRQ: CSCI 464 or equivalent.

470. PROGRAMMING IN JAVA (3). Intermediate-level course in object-oriented programming in Java, including multi-threading, graphical applets, and Internet-based distributed client-server database applications. Extensive laboratory work. PRQ: CSCI 440 or CSCI 240 and CSCI 464.

473. NET PROGRAMMING (3). Comprehensive introduction to building Windows and web applications and web services using the Microsoft.NET development platform. Includes programming in the C# language, graphics programming, the.NET Common Language Runtime, the.NET Framework classes, ADO.NET, ASP.NET, and web services. PRQ: CSCI 440 or CSCI 464, or consent of department.

475. WEB DEVELOPMENT (3). Examination of web application development. Technical topics include HTML, Cascading Style Sheets, JavaScript, and cross-browser compatibility. Includes designing an effective user interface with color, graphics, navigation, and related topics. Extensive laboratory work. PRQ: CSCI 440 or CSCI 464, or consent of department.

480. THEORETICAL OPERATING SYSTEMS (4). Principles and practices of modern operating system design. Includes file systems organization; multi-tasking; windowing interfaces such as Windows or OS/2; interprocess communication, including communications across a network; and server-client models of processing. PRQ: CSCI 330 or CSCI 463, and CSCI 440 or CSCI 464, or consent of department.

490. TOPICS IN COMPUTER SCIENCE (3).
A. Algorithms. *Crosslisted as MATH 490AX*.
B. Artificial Intelligence
C. Automata, Computability, and Formal Languages. *Crosslisted as MATH 490CX*.
D. Compiler Design and Implementation
E. Computer Systems
G. Database Concepts
J. Information Systems
K. Programming Languages
M. Computer Applications
N. Computer Graphics
Q. Computer Security
R. Computer Networks
U. Web Development
Each lettered topic may be repeated to a maximum of 6 semester hours when subject changes. PRQ: Senior standing and consent of department.

497. UNDERGRADUATE READINGS IN COMPUTER SCIENCE (1 to 3). Individual readings in computer science. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Computer Science Faculty

Rodney Angotti, Ph.D., University of Pittsburgh, associate professor, chair
Sei-Jong Chung, Ph.D., University of Iowa, associate professor
Kathi Davis, Ph.D., Illinois Institute of Technology, associate professor
Kirk Duffin, Ph.D., Brigham Young University, assistant professor
Reva Freedman, Ph.D., Northwestern University, assistant professor
Barnett Glickfeld, Ph.D., Columbia University, associate professor
George Henry, Ed.D., Northern Illinois University, associate professor
H. Joel Jeffrey, Ph.D., University of Colorado, professor
Nicholas T. Karonis, Ph.D., Syracuse University, associate professor
Ibrahim Onyuksel, Ph.D., University of Michigan, professor
Robert Rannie, Ph.D., Pennsylvania State University, professor
Neil Rickert, Ph.D., Yale University, professor
Yih-Chen Wang, Ph.D., Illinois Institute of Technology, assistant professor
Robert Zerwekh, Ph.D., University of Illinois, associate professor
Jia Zhang, Ph.D., University of Illinois, Chicago, assistant professor
Jie Zhou, Ph.D., Concordia University, assistant professor

Department of Economics (ECON)

The Department of Economics offers two degree programs. The B.A. degree program provides students with a strong intuitive understanding of the role economic incentives play in shaping society, and in the role society plays in shaping incentives. The B.S. degree program, in addition, stresses statistical and quantitative methods used to model and evaluate human action, particularly as those actions are carried out by governments or businesses.

Both degree programs provide excellent preparation for employment in business, government, or the foreign service, for law school, or for graduate studies in business administration or in public policy studies. The B.S. degree program provides stronger preparation for graduate studies in economics.

The Department of Economics welcomes minors from any discipline. Some lower division economics courses can be used by non majors toward fulfilling the social sciences area requirement in the university's general education program. The department also participates in the interdisciplinary minors in black studies, Chinese/Japanese studies, environmental studies, international studies, Latino/Latin American studies, public administration, and urban studies.

Department Requirement

The Department of Economics requires all economics majors to complete a capstone research paper in conjunction with ECON 492 or any other 400-level economics course. In this paper the student is expected to demonstrate a satisfactory ability to analyze an economic issue or problem and explain their findings effectively in writing. The research paper will be evaluated and jointly approved by the professor of the corresponding 400-level economics course and the director of undergraduate studies.

Major in Economics (B.A. or B.S.)

Requirements in Department (33-34)

ECON 260 - Principles of Microeconomics (3)
ECON 261 - Principles of Macroeconomics (3)
ECON 360 - Intermediate Microeconomics (3)
ECON 361 - Intermediate Macroeconomics (3)

For the B.A. Degree

Select from economics courses at the 300 or 400 levels (21)

For the B.S. Degree

ECON 390 - Basic Econometrics and Economic Applications (3)
and ECON 390A - Basic Econometrics Laboratory (1),
OR ECON 393 - Introduction to Mathematical Methods in Economics (3) and ECON 393A - Mathematical Economics Laboratory (1)
Select from economics courses at the 300 or 400 levels (18)

Requirements outside Department (B.A., 3-16; B.S., 11-14)

For the B.A. degree

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree.")
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4),
OR UBUS 223 - Introduction to Business Statistics (3)

For the B.S. degree

One of the following groups (11-14)
CSCI 210 - Elementary Programming (4),
OR CSCI 230 - Computer Programming in FORTRAN (4)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4),
OR
*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for a Major in Economics: 36-49 (B.A.) OR 44-47 (B.S.)

Recommendations

The Department of Economics strongly recommends that students planning to pursue an advanced degree in economics select group 2 from the requirements outside the department. Such students are also urged to take ECON 490 and ECON 491.

Teacher Certification

Students who want to be certified to teach economics/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in economics.

Admission

Students are admitted to the certification program when they have

- established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;
- attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;
- completed at least 6 semester hours of economics at NIU and earned a minimum GPA of 3.00 in all economics courses taken at the college/university level;
- completed the core competency requirements in English and oral communication;
- completed at least 20 clock hours of approved early clinical experiences; and
- obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in economics. In addition, they must complete ECON 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, ECON 496X must be taken in the semester immediately prior to enrollment in student teaching.

* Available for general education credit.

Other Requirements

Students must complete HIST 400, Student Teaching in History/ Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

Students who wish to work toward a B.A. or B.S. degree with honors in economics should discuss the matter with the departmental undergraduate adviser. Admission to the department's honors program requires the approval of the departmental undergraduate adviser and the chair and will be considered only for economics majors in their junior and senior year. These students must have a minimum GPA of 3.00 in all work.

The following are the minimum requirements for successful completion of honors work in economics.

A minimum GPA of 3.00 in all work.

A 3.40 GPA or above in economics courses.

Completion of all requirements for an economics major.

ECON 397H for 1 semester hour.

One of the following alternatives:

An honors thesis under ECON 498 for 3-6 semester hours. The senior honors thesis must be approved by the undergraduate adviser, the departmental chair, and the faculty member under whom the student pursues his or her thesis work.

OR

A total of 4 honors classes at the 300 level and above. An honors class will consist of a regular class taken in conjunction with 1 semester hour of ECON 397H. The work in ECON 397H will be evaluated and approved by the faculty member with whom the student is enrolled. Completion of this alternative automatically satisfies the ECON 397 requirement noted above.

Minor in Economics (18)

*ECON 260 - Principles of Microeconomics (3)
*ECON 261 - Principles of Macroeconomics (3)
Electives from economics courses at the 300 or 400 levels (12)

Six or more semester hours in the minor must be taken at NIU.

Course List

160. CONTEMPORARY ECONOMIC ISSUES (3). Economic approach to analysis of problems such as poverty, crime, unemployment, and inflation. Insights and evaluation of policy proposals. Not open for credit toward the major or minor in economics.

260. PRINCIPLES OF MICROECONOMICS (3). Introductory study of market and non-market mechanisms in the allocation of productive resources and in the distribution of income. Includes the study of monopolies, oligopolies, and labor unions as well as applications to selected current economic problems. Sophomore standing recommended unless student is majoring or minoring in economics.

261. PRINCIPLES OF MACROECONOMICS (3). Introductory study of factors determining aggregate income, employment, and general price level. Such factors include roles of government, the banking system, and international monetary relations. Sophomore standing recommended unless student is majoring or minoring in economics.

300. LABOR ECONOMICS (3). Wage determination and the structure of wages, the institution of unions in the United States, and problems and treatment of economic insecurity. PRQ: ECON 260.

301. LABOR PROBLEMS (3). Aims, methods, and policies of organized labor; collective bargaining; and regulation of industrial relations. PRQ: ECON 260.

302. MINORITY ECONOMIC PROBLEMS (3). Economic status of minority groups in the United States; productivity and economic theories of discrimination; and public and private programs to achieve minority economic development. PRQ: ECON 260.

310. MONETARY POLICY (3). Roles of monetary theory and policy with emphasis on their implications for dealing with current economic problems within the structure of the U.S. monetary system. PRQ: ECON 261.

320. GOVERNMENT AND BUSINESS (3). Introductory analysis of the structure, conduct, and performance of American industry. Emphasis on role of government policy through such measures as antitrust, regulation, and public ownership. PRQ: ECON 260.

330. INTERNATIONAL ECONOMICS (3). International trade, foreign exchange markets, balance of payments, and international monetary relations. Includes relevant theoretical foundations, institutions, and policy alternatives. PRQ: ECON 260 and ECON 261.

341. ECONOMIC AREA STUDIES (3).
A. Asia
B. Europe
C. Africa, South of the Sahara
D. Latin America
May be repeated to a maximum of 9 semester hours, but each topic may be taken only once. PRQ: ECON 260 and ECON 261.

360. INTERMEDIATE MICROECONOMICS (3). Exposition of economic price theory and resource allocation; commodity and factor price and output determination. PRQ: ECON 260.

361. INTERMEDIATE MACROECONOMICS (3). Theory of aggregate income, output, and employment; the price level and interest rates; and economic stabilization policy. PRQ: ECON 261.

370. CURRENT ECONOMIC ISSUES (3).
A. Health Economics
B. Income Distribution and Poverty
C. Economics and Equity
D. Economic Analysis of Recent Legislation
E. Topics in Modern Economics
Topics of current importance to consumers, resource owners, business, and government. May be repeated once as topics change. PRQ: ECON 260 and ECON 261.

380. COMPARATIVE ECONOMIC SYSTEMS (3). Tenets of conceptual economic systems. Emphasis on private enterprise, democratic socialism and communism. Thorough exploration of works of Karl Marx and V. I. Lenin. PRQ: ECON 260 and ECON 261.

385. INTRODUCTION TO URBAN AND REGIONAL ECONOMICS (3). Emphasis on the economic aspects of urban and regional problems and issues. PRQ: ECON 260.

386. ENVIRONMENTAL ECONOMICS (3). Theoretical foundations and economic analyses of pollution, congestion, resource depletion, and other environmental problems accompanying economic growth, population growth, technological change, and urbanization. Environmental policies and quality control, resource and energy conservation, population, technology, and economic growth policies. PRQ: ECON 260.

390. BASIC ECONOMETRICS AND ECONOMIC APPLICATIONS (3). Introduction to econometric concepts. Topics include simple linear estimation of consumption functions and of demand and supply functions; multiple regression as applied to money demand functions; prediction; and distributed lag models. PRQ: STAT 301 or STAT 350 or UBUS 223. CRQ: ECON 390A.

390A. BASIC ECONOMETRICS LABORATORY (1). Econometric applications. CRQ: ECON 390.

393. INTRODUCTION TO MATHEMATICAL METHODS IN ECONOMICS (3). Descriptions of static economic models by means of elementary calculus and matrix algebra; application and interpretation of the general linear model in economics. PRQ: MATH 211 or MATH 229; ECON 260 and ECON 261. CRQ: ECON 393A.

393A. MATHEMATICAL ECONOMICS LABORATORY (1). Computational, numerical, or graphical applications. CRQ: ECON 393.

397H. DIRECTED STUDY (1). Selected readings and study taken in conjunction with an upper division economics course. May be repeated to a maximum of 4 semester hours. PRQ: ECON 260 and ECON 261.

402. COMPARATIVE LABOR RELATIONS (3). Patterns of industrial relations systems in European and selected emerging economies. Scope of collective bargaining and social welfare legislation. Cooperation between the various national labor movements. PRQ: ECON 300; ECON 360 or ECON 361; or consent of department.

403. ECONOMICS OF HUMAN RESOURCES (3). Analysis of factors affecting demand for and supply of labor. Human capital analysis, discrimination, labor market operations, and public policy. PRQ: ECON 360 or consent of department.

420. ANTITRUST ECONOMICS (3). Detailed analysis of monopoly, near monopoly, and various business practices. Examination of legal and economic foundations of current and past public policies toward monopoly. PRQ: ECON 360 or consent of department.

423. PUBLIC UTILITIES (3). General economic characteristics of and governmental policy toward public utilities. Problems such as pricing, finance, and private, cooperative, and public ownership. PRQ: ECON 360 or consent of department.

425. ECONOMIC EDUCATION (1 to 3). Exploration of selected economic concepts, topics, and classroom materials/applications to assist elementary or secondary teachers in developing K-12 economics curricula and instructional activities that meet State of Illinois standards. May be repeated to a maximum of 3 semester hours when topic varies. PRQ: Consent of department.

443. ECONOMIC DEVELOPMENT (3). Analysis of major problems and issues of a theoretical and a policy nature concerning developing economies. PRQ: ECON 360 or ECON 361, or consent of department.

450. PUBLIC ECONOMICS (3). Analysis of the structure and effects of national, state, and local revenue and outlay systems. PRQ: ECON 360 or consent of department.

452. FISCAL POLICY (3). Examination of the role of the federal budget in fiscal policy. Public expenditures, taxes, and debt management are evaluated as tools of economic stabilization since World War II. PRQ: ECON 361.

454. STATE AND LOCAL FINANCE (3). Analysis of the expenditure revenue process in state and local governments. Effect of intergovernmental grants and future of fiscal federalism. PRQ: ECON 360 or consent of department.

466. BUSINESS CYCLES (3). History of business fluctuations; theories and techniques of analysis; counter cyclical monetary and fiscal policies; and survey of selected forecasting techniques. PRQ: ECON 361 or consent of department.

470. HISTORY OF ECONOMIC THOUGHT (3). Development of economic thought to the mid 19th century. Emphasis on Adam Smith, Ricardo, Malthus, Mill, and Marx. PRQ: ECON 260 and ECON 261, or consent of department.

471. MODERN ECONOMIC THOUGHT (3). Evolution of neoclassical and modern theories of value, distribution, and income. Emphasis on Walras, Menger, Jevons, Marshall, Chamberlain, Robinson, and Keynes. PRQ: ECON 260 and ECON 261, or consent of department.

474. ECONOMIC HISTORY OF THE UNITED STATES (3). Evolution and development of American economic institutions and processes from colonial times to the 20th century. Modern economic approach developed and applied to various topics. PRQ: ECON 260 and ECON 261, or consent of department.

485. URBAN ECONOMIC PROBLEMS AND POLICIES (3). Economic analysis of urban growth and land use and selected urban problems such as urban transportation, public finance, housing, poverty, and environmental quality. PRQ: ECON 360 and ECON 385, or consent of department.

489. SEMINAR IN ECONOMIC ANALYSIS (3). Economic analysis of a topic beyond the level usually reached in undergraduate courses. Examples of topics include aspects of economic growth and development, industrial organization, international economics, labor economics, health economics, monetary economics, public finance, agricultural economics, quantitative economics, financial economics, and economic theory. May be repeated to a maximum of 6 semester hours when topics change. PRQ: ECON 360, ECON 361, and MATH 211 or MATH 229.

490. ECONOMIC STATISTICS AND ECONOMETRICS (3). Topics include descriptive statistics, probability, estimation, hypothesis testing, correlation, and regression analysis, as applied to economic models. PRQ: MATH 230 or consent of department.

491. MATHEMATICAL METHODS FOR ECONOMICS (3). Mathematical methods used in economics with applications. PRQ: ECON 360, ECON 361, and MATH 229, or consent of department.

492. RESEARCH METHODS IN ECONOMICS (3). Analysis of societal issues in an economic framework; use of library, Internet, and computer resources to conduct research; and organizing and writing an effective research paper. Students write a substantial research paper on a topic of their choice and present their findings to the class. PRQ: ECON 360 and ECON 361, and consent of department.

493. SEMINAR IN POLITICAL ECONOMY (3). *Crosslisted as POLS 493X.*
A. Decision Making in the Public Sector
B. International Relations
C. Metropolitan Studies
D. Human Resources and Training Policy
Selected topics in political economy, offered jointly by the Departments of Political Science and Economics. Topics listed by semester. Each lettered topic may be taken once. PRQ: Consent of department.

494. INTERNSHIP IN ECONOMICS (3). Student works for a firm or government agency under the sponsorship of an economics faculty member. Work experience must be approved by NIU's Cooperative Education/Internship Program and the Department of Economics. Student prepares a written report under the direction of the faculty member in the economics department. S/U grading. May not be repeated. PRQ: Junior or senior standing with a declared major in economics and consent of a department faculty member.

495. SEMINAR IN CURRENT PROBLEMS (3). Issues and policies in government, politics, and economics. PRQ: Consent of department.

496. AGRICULTURAL ECONOMIC POLICY (3). Alternative methods of solving farm problems and analysis of consequences for farmers, consumers, and taxpayers. PRQ: ECON 360.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

497. INDEPENDENT STUDY IN ECONOMICS (3). Individually arranged study within the various fields of economics. Not open to economics graduate students. PRQ: ECON 360, ECON 361, and senior standing.

498. UNDERGRADUATE RESEARCH (3). Independent work in economics under the direction of a faculty member. Open only to seniors. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Economics Faculty

Eliakim Katz, Ph.D., London University, professor, chair
Evan Anderson, Ph.D., University of Chicago, assistant professor
Carl Campbell III, Ph.D., Princeton University, associate professor, assistant chair
Ardeshir J. Dalal, Ph.D., University of Iowa, professor
Jeremy Groves, Ph.D., Washington University, assistant professor
Neelam Jain, Ph.D., University of Minnesota, associate professor
Stephen Karlson, Ph.D., University of Wisconsin, associate professor
Khan A. Mohabbat, Ph.D., State University of New York, professor
Stephen Nord, Ph.D., University of Illinois, professor
Susan Porter Hudak, Ph.D., University of Wisconsin, associate professor
George Slotsve, Ph.D., University of Wisconsin, associate professor
Virginia Wilcox Gök, Ph.D., Washington University, associate professor

Department of English (ENGL)

The Department of English offers a major leading to the B.A. degree. English majors are required to take courses in several areas but are encouraged to explore the range of literary and linguistic study and allowed to proportion their work as they and their department advisers find appropriate through course selection within groups. Because of the number of courses available and the variety of professional opportunities related to the English major, students are encouraged to plan their curricula in consultation with the department adviser for majors.

The department offers a minor in English and participates with the Department of Communication in offering a minor in applied communication and with the Department of Foreign Languages and Literatures in offering a minor in comparative literature. The department also participates in the interdisciplinary minors in black studies, classical studies, Latino/Latin American studies, linguistics, and women's studies.

The department offers internship opportunities in writing, editing, and training. Students may receive credit and, in some cases, payment for these internships. Interested students should consult the department coordinator of internships.

The department offers an honors program for its majors and regularly offers courses for the University Honors Program. Several English courses can be used by non-majors toward fulfilling the humanities and the arts area requirement in the university's general education program. The department also offers several courses in composition beyond the required freshman English courses for both majors and non-majors.

Department Requirements

The GPA in the English major and minor is calculated by using all and only those English courses at NIU numbered 110 or higher, specifically excluding ENGL 103, ENGL 104, and ENGL 105.

Students with a major or minor in English must demonstrate competence in the fundamentals of English grammar by successfully completing ENGL 207 or by passing an exemption examination. Students should satisfy this requirement as early as possible. The exemption examination must be taken no later than the end of the first semester in which students enroll for any course to be included in the English major or minor. Students who have not attempted the examination by the end of their first semester will not be permitted further enrollment towards the major or minor. Failure to pass the exemption examination on the first attempt necessitates that a student successfully complete ENGL 207.

ENGL 103, ENGL 104, and ENGL 105 are not counted toward the 50-semester-hour maximum hours allowed in a single department, as described in "Special Requirements in the College of Liberal Arts and Sciences."

Major in English (B.A.)

Track 1. English Studies

Requirements in Department (39)

ENGL 200 - Literary Study: Research and Criticism (3)
Two of the following (6)
- ENGL 300A, ENGL 300B, or ENGL 300C - Advanced Essay Composition (3)
- ENGL 318 - Language and Linguistics (3)
- ENGL 320 - History of the English Language (3)
- ENGL 321 - Structure of Modern English (3)
- ENGL 432 - Topics in General Linguistics (3)
- ENGL 433 - Discourse Analysis (3)
- ENGL 434X - Women, Men, and Language (3)

Two of the following including one of ENGL 330, ENGL 331, ENGL 332, or ENGL 375 (6)
- ENGL 330 - American Literature to 1830 (3)
- ENGL 331 - American Literature: 1830-1860 (3)
- ENGL 332 - American Literature: 1860-1920 (3)
- ENGL 333 - American Literature: 1920-1960 (3)
- ENGL 334 - American Literature: 1960-Present (3)
- ENGL 374 - The American Short Story (3)
- ENGL 375 - The American Novel (3)
- ENGL 376 - American Drama Since 1900 (3)
- ENGL 377 - American Poetry Since 1900 (3)
- ENGL 381 - American Ethnic Literature (3)

One course from each group below, including one of ENGL 406, ENGL 407, or ENGL 409 (12)
- ENGL 405 - Early English Literature (3),
  OR ENGL 406 - Chaucer (3),
  OR ENGL 420 - Arthurian Literature (3)
- ENGL 407 - Shakespeare (3),
  OR ENGL 408 - The English Renaissance: 1500-1603 (3),
  OR ENGL 409 - Milton (3),
  OR ENGL 410 - 17th Century English Literature: 1603-1660 (3)
- ENGL 412 - Restoration and 18th Century English Literature (3),
  OR ENGL 413 - The Romantic Period (3),
  OR ENGL 470 - The English Novel to 1900 (3)
- ENGL 414 - The Victorian Age (3),
  OR ENGL 471 - The English Novel Since 1900 (3),
  OR ENGL 475 - British Poetry Since 1900 (3),
  OR ENGL 476 - British Drama Since 1900 (3)

Four courses, at least three of which must be at the 300 or 400 level, selected from the above courses not used to fulfill area requirements and/or from other English courses (12)

Requirements outside Department (0-12)

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Total Hours for a Major in English, Track 1: 39-51

Track 2. English Studies with Teacher Certification[1]

Students majoring in English who seek certification to teach at the secondary level should consult with the coordinator of teacher certification in English at the earliest possible date. Undergraduate majors apply for admission to teacher certification in English at the end of the sophomore year, except in the case of transfer students, who normally apply at the end of their first semester at NIU. Graduate students should see the appropriate section of the entry in the *Graduate Catalog* for the Department of English. Students who already possess the baccalaureate or higher degree and wish to pursue certification without becoming a candidate for a degree should consult the coordinator of teacher certification in English as early as possible.

Admission Requirements

Application in writing to the coordinator.

Passing score on the Basic Skills Test.

Completion of at least 9 semester hours of English beyond ENGL 105 at NIU, including ENGL 200 and ENGL 207, with a GPA of at least 3.00. Students may be exempted from ENGL 207 by passing an exemption examination.

[1] These are minimum requirements. Meeting these requirements will not guarantee students admission to the program or to particular courses.

Completion of at least 15 hours of work at NIU with a GPA of at least 2.75.

Completion of the core competency requirements in English, communication studies, and mathematical sciences with a grade of C or better in each course used to satisfy these requirements.

Satisfactory interview with the coordinator.

Retention

Students must have a minimum GPA of 2.75 in all work at NIU with a minimum GPA of 3.00 in all English courses beyond ENGL 105 at NIU. They must obtain a grade of B or better in ENGL 300C, ENGL 404, and ENGL 480 and have a satisfactory review of progress with the coordinator each semester.

Requirements in Department (39)

ENGL 200 - Literary Study: Research and Criticism (3)
ENGL 300C - Advanced Essay Composition (3)
ENGL 310 - Literary Classics (3)
ENGL 318 - Language and Linguistics (3),
  OR ENGL 321 - Structure of Modern English (3)
One of the Following (3)
  ENGL 330 - American Literature to 1830 (3)
  ENGL 331 - American Literature: 1830-1860 (3)
  ENGL 332 - American Literature: 1860-1920 (3)
  ENGL 375 - The American Novel (3)
One of the Following (3)
  ENGL 333 - American Literature: 1920-1960 (3)
  ENGL 334 - American Literature: 1960-Present (3)
  ENGL 374 - The American Short Story (3)
  ENGL 376 - American Drama Since 1900 (3)
  ENGL 377 - American Poetry Since 1900 (3)
  ENGL 381 - American Ethnic Literature (3)
ENGL 407 - Shakespeare (3)
One of the Following (3)
  ENGL 405 - Early English Literature (3)
  ENGL 406 - Chaucer (3)
  ENGL 408 - The English Renaissance: 1500-1603 (3)
  ENGL 409 - Milton (3)
  ENGL 410 - 17th Century English Literature: 1603-1660 (3)
  ENGL 412 - Restoration and 18th Century English Literature (3)
  ENGL 420 - Arthurian Literature (3)
One of the Following (3)
  ENGL 413 - The Romantic Period (3)
  ENGL 414 - The Victorian Age (3)
  ENGL 470 - The English Novel to 1900 (3)
  ENGL 471 - The English Novel Since 1900 (3)
  ENGL 475 - British Poetry Since 1900 (3)
  ENGL 476 - British Drama Since 1900 (3)
ENGL 404 - The Teaching of Writing (3)
ENGL 479 - The Teaching of Literature (3)
ENGL 480 - Materials and Methods of Teaching English in the Middle and High School (3)
ENGL 485 - Student Teaching (Secondary) in English (7-12)
One course selected from the above courses not used to fulfill area requirements and/or from other English courses above ENGL 105 (3)

ENGL 300C, ENGL 404, ENGL 479, ENGL 480, and ENGL 485 must be taken in sequence. ENGL 480 must be taken in the semester immediately prior to enrollment in ENGL 485. Students are admitted to ENGL 485 only upon application, review of their academic record and of their professional fitness, and satisfactory completion of all other work required for graduation, including all other work in the major.

Requirements Outside Department (9-21)

Fulfillment of B.A. foreign language requirement (0-12).
  (See "Foreign Language Requirement for the B.A. Degree.")

Students seeking certification should consult the coordinator as early as possible

Total Hours for a Major in English, Track 2: 48-60

Additional Requirements

The state of Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. This requirement may be satisfied by successfully completing the following courses.

ILAS 201 (1) (must be taken concurrently with ENGL 300C)
ILAS 301 (1) (must be taken concurrently with ENGL 404)
ENGL 482 (1) (must be taken concurrently with ENGL 480)
A course in human growth and development (3)
A course in the psychology of exceptional children (3)

Students are also required to have course work in reading instruction at the secondary level and in history and/or philosophy of education. Students should consult with the certification adviser in English to determine which courses are approved for satisfying the additional requirements. Students must also pass the state of Illinois certification examination in English.

Degree with Honors

Students in the University Honors Program are automatically eligible for English honors work, as are students who have at least a 3.00 GPA in their English courses. Students who wish to earn a baccalaureate degree with honors in English must graduate with a minimum GPA of 3.50 in the English major and complete 12 semester hours or more of English honors work (including ENGL 497H) with a GPA of at least 3.20 in those courses.

Minor in English (18)

The minor in English is designed to allow students majoring in other fields to supplement their studies in a manner that best meets their needs and interests. Possibilities include a general survey of British and American literature, a focus on a single period or genre, a focus in writing or linguistics, or some other coherent selection of courses. The individual program and specific courses are to be chosen in consultation with the department adviser for minors.

ENGL 200 - Literary Study: Research and Criticism (3)
ENGL 300 - Advanced Essay Composition (3)
Four additional courses beyond ENGL 105, at least three of them on the 300-400 level, to be selected in consultation with the department adviser for minors (12)

Six or more semester hours in the minor must be taken at NIU.

Course List

Writing Courses

102. COMPOSITION SKILLS (3). Developmental composition with an emphasis on frequent writing and extensive revision of expressive, expository, and persuasive essays accompanied by critical reading of both professional and peer nonfiction prose. Weekly tutorials and writing in electronic environments required. Preparation for ENGL 103. Does not count as credit for graduation. S/U grading.

103. RHETORIC AND COMPOSITION I (3). Writing and revising expressive, expository, and persuasive essays accompanied by the reading of nonfiction prose. Weekly writing assignments. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement.

104. RHETORIC AND COMPOSITION II (3). Writing and revising argumentative and analytical essays accompanied by the critical

reading of various forms of writing. Documented writing required in all sections. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement. PRQ: ENGL 103 with a grade of C or better.

105. RHETORIC AND COMPOSITION (3). Concentrated rhetorical approach to the writing and revising of expressive, expository, and persuasive essays accompanied by the critical reading of various forms of writing. Documented writing required in all sections. Students with credit for ENGL 105 may not take ENGL 103 or ENGL 104. Not used in calculating English major or minor GPA. Grade of C or better required to satisfy English core competency requirement. PRQ: Placement only through English Core Competency Examination

250. PRACTICAL WRITING (3). Practice in writing skills and the organization and structuring of prose appropriate to the humanities, social sciences, and sciences. Open to majors and non-majors.

300. ADVANCED ESSAY COMPOSITION (3).
A. General.
B. Pre-Law. Designed to meet special writing needs of the pre-law student.
C. English Certification. Designed to meet the special writing needs of students seeking certification to teach in the secondary schools. PRQ: Admission to teacher certification in English. CRQ: ILAS 201.

Writing expressive, persuasive, and informative essays and developing appropriate stylistic and organizational techniques. Open to both majors and non-majors.

301. WRITING POETRY I (3). Beginning course in writing poetry.

302. WRITING FICTION I (3). Beginning course in writing fiction.

303. WRITING CREATIVE NONFICTION (3). Writing informal and formal nonfiction essays, emphasizing a literary approach to language and flexibility of form. Essay models include memoir, personal essay, nature essay, segmented essay, and travel essay, and may include biography and history. PRQ: Any writing course beyond the freshman level or consent of department.

304. WRITING ARTS CRITICISM (3). Practice in writing critical reviews of visual art, music, film, and other art forms. Designed for students who have some knowledge of the art form they choose to write on and who seek guidance in organizing and communicating their judgments.

308. TECHNICAL WRITING (3). Principles and strategies for planning, writing, and revising technical documents common in government, business, and industry (e.g., manuals, proposals, procedures, newsletters, brochures, specifications, memoranda, and formal reports). Topics include analysis of audience and purpose, simplifying complex information, document design, and project management.

398. TOPICS IN THE PRACTICE AND THEORY OF COMPOSITION (3). Selected aspects of composition such as advanced rhetorical argumentative writing and writing for publication. May be repeated to a maximum of 6 semester hours when topic varies.

401. WRITING POETRY II (3). Advanced course in writing poetry. PRQ: ENGL 301.

402. WRITING FICTION II (3). Advanced course in writing fiction. PRQ: ENGL 302.

403. TECHNICAL EDITING (3). Principles and strategies for preparing technical documents for publication, including editing for content, organization, style, and correctness. Topics include the editor's roles and responsibilities, the levels of editing, proofreading and copyediting, readability, format, production, and usability testing.

424. TOPICS IN TECHNICAL WRITING (1 to 3). Studies in selected topics of special interest to students, teachers, and practitioners of written technical communication. May be repeated to a maximum of 6 semester hours when topic varies.

451. ESL RHETORIC AND COMPOSITION I (3). Only for graduate students whose native language is not English. Exploration of academic discourse in a cross-disciplinary context. Writing and revising essays with special support for grammar and mechanics. Reading of academic prose. Weekly writing assignments. PRQ: Placement by testing.

452. ESL RHETORIC AND COMPOSITION II (3). Only for graduate students whose native language is not English. Exploration of critical strategies and documented writing in the disciplines. Documented writing required in all sections. Special support for grammar and mechanics. PRQ: ENGL 451.

453. ESL RHETORIC AND COMPOSITION (3). Only for graduate students whose native language is not English. A concentrated approach to disciplinary writing with special support for grammar and mechanics. Reading of academic prose. Documented writing required in all sections. PRQ: Placement by testing.

494. WRITING CENTER PRACTICUM (1 to 3). *Crosslisted as ILAS 494X.* Theoretical and practical instruction in tutoring, required for all undergraduate writing consultants in the University Writing Center. Includes research on cross-curricular writing tasks in a supervised, on-the-job situation. May be repeated to a maximum of 3 semester hours with consent of department.

495. PRACTICUM IN ENGLISH (1 to 3). Practical writing and other professional experience in supervised on-the-job situations. May be repeated to a maximum of 3 semester hours. S/U grading.

496. INTERNSHIP IN WRITING, EDITING, OR TRAINING (1 to 6). Involves primarily writing, editing, or training in business, industry, or government setting, and that is jointly supervised by the English department's internship coordinator and an individual from the sponsoring company or organization. May be repeated to a maximum of 6 semester hours. Up to 3 semester hours may be applied toward the English department's program requirements. S/U grading. PRQ: Prior approval by the Department of English, a minimum of 120 contact hours, and other requirements as specified by the department.

Language and Lingusitics Courses

207. FUNDAMENTALS OF ENGLISH GRAMMAR (3). Introduction to modern English pedagogical grammar. Traditional terminology and analytical tools used to describe the grammar and use of written Standard English.

318. LANGUAGE AND LINGUISTICS (3). Introduction to the nature of language and fundamental principles of linguistic analysis. May include interdisciplinary aspects of linguistics, the biological foundations of language, language acquisition, language variation and change, and languages of the world, their classification, typology, and viability.

320. HISTORY OF THE ENGLISH LANGUAGE (3). Survey of the English language from its Indo-European origins to the modern period. Topics include phonology and grammar, the relationships between English and other languages, and the social, political, and cultural forces affecting linguistic change.

321. STRUCTURE OF MODERN ENGLISH (3). Survey of Modern English and contemporary linguistic methods of analyzing and describing its major structures and their functions.

322. LANGUAGE IN AMERICAN SOCIETY (3). Introduction to the study of language in its social context. Focus on varieties of American English with some attention to the status of minority languages. Sociolinguistic approach to language variation by region, social class, ethnicity, gender, and social context. Standardization and attitudes toward nonstandard dialects and minority languages. Relationship between language and power and social control.

432. TOPICS IN GENERAL LINGUISTICS (3). Selected problems in descriptive, theoretical, applied, or historical linguistics. May be repeated to a maximum of 6 semester hours when topic varies.

433. DISCOURSE ANALYSIS (3). Survey of approaches to the study of language above the level of the sentence. Structural and functional analysis of a variety of oral and written genres, such as oral narrative and conversation, literary texts, and written expository prose.

434X. WOMEN, MEN, AND LANGUAGE (3). *Crosslisted as WOMS 434.* Examination of empirical evidence pertaining to language variation by sex and gender identity within the framework of sociolinguistics. Focuses on characteristics of feminine and masculine speech and conversational styles, societal attitudes towards them, and their implications for men and women in society. Biological foundations and sociogenesis of sex differences in language; interaction effects on language variation of other social variables such as age, class, and ethnic identity; and crosscultural differences.

Teacher Certification Courses

404. THE TEACHING OF WRITING (3). Approaches to teaching and evaluating composition in the middle and high school with emphasis on the multicultural classroom. PRQ: ENGL 300C or consent of department. CRQ: ILAS 301.

479. THE TEACHING OF LITERATURE (3). Approaches to teaching literature on the junior and senior high school level with emphasis on recent developments in the field. PRQ: ENGL 200, 9 semester hours of literature at the 300 and 400 level, and senior standing; or consent of department.

480. MATERIALS AND METHODS OF TEACHING ENGLISH IN THE MIDDLE AND HIGH SCHOOL (3). Methods, devices, techniques, and curriculum materials useful to the English teacher in the middle and high school. Attention given to teaching reading to students with reading difficulties, distinguishing techniques for teaching the exceptional student, and planning for multicultural learning situations. PRQ: ENGL 404 or consent of department. CRQ: ENGL 482.

481. SEMINAR IN SECONDARY ENGLISH MATERIALS AND METHODS (3). In-depth examination of particular aspects of teaching language, literature, or composition done individually and in small groups. Research and reports determined by gaps in students' individual backgrounds as well as their special interests. PRQ: Consent of department.

482. CLINICAL EXPERIENCE IN HIGH SCHOOL AND MIDDLE SCHOOL ENGLISH AND LANGUAGE ARTS (1 to 2). Discipline-based clinical experience for students seeking initial secondary teacher certification in English or language arts in grades 6-12. Includes observations, evaluation, methods, and practicum on methods and problems in teaching. Includes a minimum of 40 clock hours of supervised and formally evaluated experiences in the setting likely for the student teaching experience. PRQ: Consent of department. CRQ: ENGL 480.

485. STUDENT TEACHING (SECONDARY) IN ENGLISH (7 to 12). Student teaching for one semester. Assignments arranged with the coordinator of teacher education in English after approval by the Department of English. Not available for credit in the major. PRQ: ENGL 480 and consent of department.

Literature Courses

110. EXPERIENCE OF FICTION (3). Close reading for the appreciation of fiction as an embodiment of human and cultural values. Not available for credit to students with credit in ENGL 202.

115. MASTERPIECES OF BRITISH LITERATURE (3). Fiction, poetry, and drama from the major periods of British literature read for understanding and appreciation. Not available for credit to students with credit in ENGL 210.

116. MASTERPIECES OF AMERICAN LITERATURE (3). Fiction, poetry, and drama from the major periods of American literature read for understanding and appreciation. Not available for credit to students with credit in ENGL 280.

200. LITERARY STUDY: RESEARCH AND CRITICISM (3). Methods of critical analysis and scholarship as applied to major genres; conventions of writing English studies. Required of all majors and minors no later than the first semester of upper-division work in literature.

201. INTRODUCTION TO POETRY (3). Study of individual poems and of poetry in its cultural context. Emphasis on the development of the student's ability to read and appreciate poetry.

205. SURVEY OF ENGLISH LITERATURE I (3). Study of British writers from Chaucer to 1789 in their historical, cultural, and literary environment.

206. SURVEY OF ENGLISH LITERATURE II (3). Study of British writers from 1789 to the present in their historical, cultural, and literary environment.

298. TOPICS IN LITERATURE (3). Exploration of a literary subject ordinarily outside the scope of traditional courses in literature. Topics might include such subgenres of literature as the detective novel or science fiction, or literary trends of current interest.

305. PRINCIPLES OF CRITICISM (3). Readings in literary theory, relationship between literary theory and critical methods and modes, and principles of evaluation, appreciation, and understanding.

306. READING DRAMA (3). Study of individual plays and of drama in its cultural context. Emphasis on student's ability to read, view, and appreciate drama.

307. SELECTED READINGS IN DRAMA (3). Representative selections from world drama, focusing either on such periods as classical, Renaissance, or modern, or on a theme. Subject announced.

310. LITERARY CLASSICS (3). Selected works, from ancient to modern, such as Plato's Symposium, Ovid's Metamorphoses, Montaigne's Essays, Pushkin's Eugene Onegin, and Camus's The Plague, read in translation and with attention to theme, technique, genre, and context.

315. SHAKESPEARE (3). Representative plays. Intended to prepare the general student to read and view the plays independently. Not available for credit in the major.

330. AMERICAN LITERATURE TO 1830 (3). American literature from the beginnings through the early national period, including such writers as Bradstreet, Taylor, Edwards, Franklin, Equiano, Rowson, and Cooper.

331. AMERICAN LITERATURE: 1830-1860 (3). Literature of the American Romantic period, including such writers as Emerson, Hawthorne, Poe, Fuller, Stowe, Thoreau, and Melville.

332. AMERICAN LITERATURE: 1860-1920 (3). Includes such writers as Dickinson, Twain, James, Chopin, Chesnutt, Wharton, and Cather.

333. AMERICAN LITERATURE: 1920-1960 (3). Includes such writers as Stevens, Eliot, Fitzgerald, Faulkner, Hurston, and Williams.

334. AMERICAN LITERATURE: 1960-PRESENT (3). Includes such writers as Bellow, Rich, Morrison, Pynchon, Ashbery, and Kushner.

335. NON-WESTERN AND THIRD-WORLD LITERATURE (3). Study of one non-Western or Third-World literary tradition or a survey of literary traditions, such as African, Asian, Caribbean, Middle Eastern, or Latin American. May focus on the classic texts produced by these cultures (in translation) or on contemporary texts. Subject announced in the Schedule of Classes. May be repeated to a maximum of 6 semester hours when subject varies.

337. WESTERN LITERATURE: CLASSICAL AND MEDIEVAL (3). Intensive study of representative selections translated from the works of Greek, Roman, and other European writers, such as Homer, Sappho, Aeschylus, Sophocles, Plato, Virgil, Ovid, Dante, Tasso, Rabelais, and Cervantes.

338. WESTERN LITERATURE: RENAISSANCE TO 1900 (3). Comparative study of representative works from the early modern period through the 19th century, read in translation, by authors such as Ariosto, Racine, Diderot, Goethe, Baudelaire, and Tolstoy.

339. RECENT WESTERN LITERATURE (3). Comparative study of representative modern works, read in translation, by authors such as Chekov, Proust, Kafka, Rilke, Dinesen, Duras, and Calvino.

340. THE BIBLE AS LITERATURE (3). Introduction to the Bible as literature, the history and the historical circumstances of its composition, and the structure and style of its principal parts.

360. LITERATURE AND OTHER DISCIPLINES (3). Interrelationships between the study of literature and other disciplines. Pertinence of other disciplines to literature, for example, literature and psychology, literature and sociology, literature and philosophy, and literature and theology. Topics announced. May be repeated to a maximum of 6 semester hours when subject varies.

363. LITERATURE AND FILM (3). Relationship between film and literature, with specific attention to the aesthetic impact of narrative, drama, and poetry on film and to the significance in film of romanticism, realism, and expressionism as literary modes. Nature and history of the adaptation of literary works to film.

374. THE AMERICAN SHORT STORY (3). Shaping and development of the modern short story as a literary form by American writers, from the early 19th century to the present.

375. THE AMERICAN NOVEL (3). Development of the American novel from the 18th century to the present.

376. AMERICAN DRAMA SINCE 1900 (3). Selected works by representative American playwrights since 1900.

377. AMERICAN POETRY SINCE 1900 (3). Selected works by representative American poets since 1900.

381. AMERICAN ETHNIC LITERATURE (3).
A. Native American Literature. Historical survey of the fiction, drama, poetry, and prose of Native American writers such as Zitkala Sa, McNickel, Momaday, Welch, King, and Erdrich.
B. Latina/Latino Literature. Historical survey of the fiction, drama, poetry, and prose of Latina/Latino writers writing in English in the United States.
C. African American Literature. Historical survey of the fiction, drama, poetry, and prose of African American writers such as Wheatley, Douglass, Chesnutt, Cullen, Hughes, Baldwin, and Morrison.
D. Special Topics. Study of one or more ethnic traditions in American literature not covered in ENGL 381A, ENGL 381B, or ENGL 381C. Topic announced. May be repeated to a maximum of 6 semester hours when topic varies.
Study of one or more ethnic traditions in American literature.

382. WOMEN WRITERS: THE TRADITION IN ENGLISH (3). Literary accomplishments of women writing in English, covering a range of genres such as fiction, poetry, essays, and drama. Effects of gender on the reading and writing of literature.

383. GAY AND LESBIAN LITERATURE (3). Historical survey of lesbian and gay fiction, drama, poetry, and prose by American and British writers such as Shakespeare, Behn, Whitman, Hall, Forster, Ortiz-Taylor, Kushner, Leavitt, and Winterson.

399H. TOPICS IN AMERICAN LITERATURE: HONORS (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

400. LITERARY TOPICS (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies.

405. EARLY ENGLISH LITERATURE (3). English literature to 1500. Modernized texts used for works which might otherwise present language problems.

406. CHAUCER (3). The poetry, with emphasis on The Canterbury Tales.

407. SHAKESPEARE (3). Representative comedies, tragedies, and historical plays. Attention given to Shakespeare's growth as a literary artist and to the factors which contributed to that development; his work evaluated in terms of its significance for modern times.

408. THE ENGLISH RENAISSANCE: 1500-1603 (3). Literature during the Early Tudor and Elizabethan periods, as reflected in the work of such writers as More, Spenser, Sidney, Marlowe, and Shakespeare.

409. MILTON (3). Poetry and prose, with emphasis on Paradise Lost.

410. 17TH CENTURY ENGLISH LITERATURE: 1603-1660 (3). Literature during the Jacobean, Caroline, and Commonwealth periods, as reflected in the work of such authors as Bacon, Donne, Jonson, Browne, Milton, and Marvell.

412. RESTORATION AND 18TH CENTURY ENGLISH LITERATURE (3). Later 17th and 18th century literature, including selections from such representative writers as Dryden, Swift, Pope, and Johnson.

413. THE ROMANTIC PERIOD (3). Earlier 19th-century English literature, including selections from such representative authors as Blake, Wollstonecraft, Wordsworth, Austen, Byron, the Shelleys, and Keats.

414. THE VICTORIAN AGE (3). Later 19th-century English literature, including such writers as the Brownings, Tennyson, the Brontës, Dickens, Eliot, Arnold, and Pater.

420. ARTHURIAN LITERATURE (3). Representative medieval works, in both Middle English and translation from European languages, with consideration of their influence on later Arthuriana.

470. THE ENGLISH NOVEL TO 1900 (3). Development of the English novel in the 18th and 19th centuries, including works by such representative authors as Defoe, Richardson, Fielding, Austen, Thackeray, the Brontës, Eliot, and Hardy.

471. THE ENGLISH NOVEL SINCE 1900 (3). Includes works by such representative authors as Conrad, Joyce, Woolf, Lawrence, Murdoch, Amis, Naipaul, and Drabble.

475. BRITISH POETRY SINCE 1900 (3). Includes works by such representative authors as Hopkins, Yeats, Sitwell, Eliot, Smith, Thomas, and Heaney.

476. BRITISH DRAMA SINCE 1900 (3). Includes works by such representative playwrights as Wilde, Shaw, Beckett, Osborne, Pinter, Stoppard, and Churchill.

483. RENAISSANCE LITERATURE (3). Comparative study of works, read in translation, by such continental figures as Petrarch, Erasmus, Machiavelli, Marguerite de Navarre, Rabelais, and Cervantes.

489. EUROPEAN NOVEL (3). Selected works since 1700, read in translation, by such novelists as Goethe, Dostoevsky, Flaubert, Tolstoy, Kafka, Duras, and Calvino. Organization may be thematic or chronological.

499H. TOPICS IN ENGLISH LITERATURE: HONORS (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

General

490. SENIOR SEMINAR IN ENGLISH STUDIES (3).
A. Literature
B. Linguistics
C. Rhetoric
D. Creative Writing
E. English Pedagogy
Intensive study of selected topics within one area in English studies. Directed study to prepare a seminar project for presentation to the seminar participants. Topics announced. PRQ: Senior standing.

497. DIRECTED STUDY (1 to 3). Directed study in any area of English studies. PRQ: Consent of department.

497H. HONORS DIRECTED STUDY (3). Directed study in an area of English studies. Open to all department honors students. May be repeated once. PRQ: Consent of department.

498. TOPICS IN ENGLISH STUDIES (1 to 3). Exploration of a topic or theme in English studies via lectures, discussions, and reports. May be repeated to a maximum of 6 semester hours when topic varies.

English Faculty

Deborah H. Holdstein, Ph.D., University of Illinois, professor, chair
Gulsat Aygen, Ph.D., Harvard University, assistant professor
William Baker, Ph.D., University of London, Presidential Research Professor
Alexandra G. Bennett, Ph.D., Brandeis University, assistant professor
Betty J. Birner, Ph.D., Northwestern University, associate professor
David Bywaters, Ph.D., Washington University, associate professor
Susan F. Callahan, Ph.D., University of Louisville, associate professor
Edward Callary, Ph.D., Louisiana State University, associate professor
Jeffrey P. Chown, Ph.D., University of Michigan, adjunct professor
Nicole Clifton, Ph.D., Cornell University, associate professor
Michael J. Day, Ph.D., University of California, Berkeley, associate professor
Deborah C. De Rosa, Ph.D., University of North Carolina at Chapel Hill, assistant professor
Susan E. Deskis, Ph.D., Harvard University, associate professor

Sue W. Doederlein, Ph.D., Northwestern University, associate professor
Jeffrey Einboden, Ph.D., University of Cambridge, assistant professor
Philip E. Eubanks, Ph.D., University of Illinois, associate professor
Keith Gandal, Ph.D., University of California, Berkeley, associate professor
James R. Giles, Ph.D., University of Texas, Presidential Teaching Professor
Ibis Gómez-Vega, Ph.D., University of Houston, associate professor
David Gorman, Ph.D., Columbia University, associate professor
Larry R. Johannessen, Ph.D., University of Chicago, associate professor
Jeffrey Johnson, Ph.D., University of Missouri, professor
William C. Johnson, Ph.D., University of Iowa, Distinguished Teaching Professor
Mark Kipperman, Ph.D., University of Pennsylvania, professor
John V. Knapp, Ph.D., University of Illinois, Ph.D., University of Wisconsin, professor
Hana Layson, Ph.D., University of Chicago, assistant professor
Amy K. Levin, Ph.D., City University of New York, professor
Christoph Lindner, Ph.D., University of Edinburgh, assistant professor
Jennifer H. Maher, Ph.D., Iowa State University, assistant professor
Brian T. May, Ph.D., University of Virginia, associate professor
Amy Newman, Ph.D., University of Ohio, associate professor
Bradley T. Peters, Ph.D., University of Iowa, associate professor
Kathleen Renk, Ph.D., University of Iowa, assistant professor
Jessica L. Reyman, Ph.D., University of Minnesota, assistant professor
John D. Schaeffer, Ph.D., St. Louis University, professor
Sean N. Shesgreen, Ph.D., Northwestern University, Distinguished Research Professor
Diana L. Swanson, Ph.D., University of Minnesota, associate professor
Mark W. Van Wienen, Ph.D., University of Illinois, associate professor

Department of Foreign Languages and Literatures (FL--)

The Department of Foreign Languages and Literatures offers major programs leading to the B.A. degree in French, Russian, German, and Spanish. There are two emphases available for each major. Foreign language majors may gain certification to teach at the secondary level in French, German, and Spanish.

The department offers minors in French, German, Italian, Russian, and Spanish, participates in the interdisciplinary minors in Chinese/ Japanese studies, classical studies, comparative literature, Latino/ Latin American studies, linguistics, Southeast Asian studies, and women's studies, and offers FLCL 271, Classical Mythology, FLFR 371, Masterpieces of French Literature in Translation, FLIT 272, The Italian Renaissance, and FLRU 261, Russian Culture and Literature, in the humanities and the arts area of distributive studies. French majors may not take FLFR 371 and Russian majors may not take FLRU 261 for general education credit.

Department Regulations

Students with high school credit in French, German, or Spanish who wish to continue in that language must gain placement into the appropriate course in the desired sequence by taking the foreign language placement examination. On the basis of this examination, the student must begin the chosen language sequence in the course indicated by the placement examination, disregarding that course's prerequisites. For example, a student gaining placement into FLFR 201 does not have to complete FLFR 101 or FLFR 102. Students with high school credit in one of the other languages offered by the department for which no placement test is available should see the appropriate coordinator in the Department of Foreign Languages and Literatures. Transfer students with college-level credit in a foreign language who wish to continue in that language should register for the course that follows the highest level course for which transfer credit has been granted. Prerequisites must be followed in all other cases.

With the consent of the department, native speakers of Spanish may substitute FLSP 215 for any and all levels of FLSP 101 through FLSP 202, as well as for FLSP 211.

Majors in Foreign Languages

Students majoring in one foreign language may complete a second major in another language.

Foreign language majors may complete minors in languages other than that of their major.

Recommendation for Foreign Language Majors

Majors in French, German, and Spanish are urged to spend a minimum of one semester in study abroad. NIU currently maintains appropriate programs in France, Austria, Spain, and Costa Rica. Majors in Russian are encouraged to participate in an approved summer language program or a study-travel program in the Soviet Union.

French and German majors in a translation and business emphasis are strongly advised to take additional course work in business and international relations.

Major in French (B.A.)

Emphasis 1. Language and Literature

Requirements in Department (49)

FLFR 101 and FLFR 102[1] - Elementary French I and II (6)
FLFR 201 and FLFR 202[1] - Intermediate French I and II (6)
FLFR 301 - Advanced French Grammar and Composition (3)
FLFR 302 - Advanced French Grammar and Translation (3)
FLFR 311 and FLFR 312 - Advanced French Conversation I and II (6)
FLFR 320 - *Analyse de Texte* (3)
FLFR 321 - Masterpieces in French Literature I (3),
  OR FLFR 322 - Masterpieces in French Literature II (3),
  OR FLFR 323 - Special Topics in French Language, Literature, or Culture (3)
FLFR 411 - Advanced Composition in French (3)
FLFR 481 - French Phonetics and Phonemics (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Course work from 400-level French literature courses (6)
Course work from 400-level French non-literature courses (6)

Total Hours for Emphasis 1, Language and Literature: 49

Emphasis 2. Translation and Business French

Requirements in Department (46)

FLFR 101 and FLFR 102[1] - Elementary French I and II (6)
FLFR 201 and FLFR 202[1] - Intermediate French I and II (6)
FLFR 301 - Advanced French Grammar and Composition (3)
FLFR 302 - Advanced French Grammar and Translation (3)
FLFR 311 and FLFR 312 - Advanced French Conversation I and II (6)
FLFR 320 - *Analyse de Texte* (3)
FLFR 321 - Masterpieces in French Literature I (3),
  OR FLFR 322 - Masterpieces in French Literature II (3),
  OR FLFR 323 - Special Topics in French Language Literature, or Culture (3)
FLFR 412 - Commercial French (3)
FLFR 415 - Contemporary French (3)
FLFR 463 - *La France Contemporaine* (3),
  OR FLFR 464 - Paris: City of Lights (3)
FLFR 483 - *Theme et Version* (3)
FLFR 484 - Advanced Translation (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

Requirements outside Department (15)

MGMT 346 - Business Communication (3)
MKTG 310 - Principles of Marketing (3)
MKTG 367 - Principles of Global Marketing (3)
POLS 285 - Introduction to International Relations (3)
One of the Following (3)
  MGMT 333 - Principles of Management (3)
  MKTG 325 - Buyer Behavior (3)
  MKTG 345 - Business Marketing (3)
  MKTG 348 - Integrated Marketing Communications (3)
  MKTG 350 - Principles of Selling (3)
  MKTG 355 - Direct Marketing (3)
  MKTG 365 - Principles of Retailing (3)
  MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business French: 61

[1] May be waived on the basis of high school preparation or placement examination

Major in German (B.A.)

Emphasis 1. Language and Literature

Requirements in Department (46)

FLGE 101and FLGE 102[1] - Beginning German I and II (6)
FLGE 201 and FLGE 202[1] - Intermediate German I and II (6)
FLGE 301 - Advanced German Grammar and Composition I (3)
FLGE 302 - Advanced German Grammar and Composition II (3)
FLGE 311 - Advanced German Conversation (3)
FLGE 321 and FLGE 322 - Masterpieces of German Literature (6)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Course work from 400-level German literature courses (6)
Course work from other 400-level German courses (12)

Total Hours for Emphasis 1, Language and Literature: 46

Emphasis 2. Translation and Business German

Requirements in Department (46)

FLGE 101 and FLGE 102[1] - Beginning German I and II (6)
FLGE 201 and FLGE 202[1] - Intermediate German I and II (6)
FLGE 301 - Advanced German Grammar and Composition I (3)
FLGE 302 - Advanced German Grammar and Composition II (3)
FLGE 311 - Advanced German Conversation (3)
FLGE 321 and FLGE 322 - Masterpieces of German Literature (6)
FLGE 411 - Modern German (3)
FLGE 412 - Business German I (3)
FLGE 482 - Techniques of Translation I (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Course work from 400-level courses (9)

Requirements outside Department (15)

MGMT 346 - Business Communication (3)
MKTG 310 - Principles of Marketing (3)
MKTG 367 - Principles of Global Marketing (3)
POLS 285 - Introduction to International Relations (3)
One of the following (3)
- MGMT 333 - Principles of Management (3)
- MKTG 325 - Buyer Behavior (3)
- MKTG 345 - Business Marketing (3)
- MKTG 348 - Integrated Marketing Communications (3)
- MKTG 350 - Principles of Selling (3)
- MKTG 355 - Direct Marketing (3)
- MKTG 365 - Principles of Retailing (3)
- MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business German: 61

Major in Russian (B.A.)

Emphasis 1. Language and Literature

Requirements in Department (37)

FLRU 101 and FLRU 102[1] - Elementary Russian I and II (6)
FLRU 201 and FLRU 202[1] - Intermediate Russian I and II (6)
FLRU 301 - Advanced Russian Grammar and Composition (3)
FLRU 311 - Russian Conversation and Composition (3)
FLRU 321 - Introduction to Russian Literature (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Electives from 400-level Russian courses (15)

Total Hours for Emphasis 1, Language and Literature: 37

Emphasis 2. Russian Studies

Requirements in Department (25)

FLRU 101 and FLRU 102[1] - Elementary Russian I and II (6)
FLRU 201 and FLRU 202[1] - Intermediate Russian I and II (6)
FLRU 301 - Advanced Russian Grammar and Composition (3)
FLRU 311 - Russian Conversation and Composition (3)
FLRU 321 - Introduction to Russian Literature (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Elective from 400-level Russian courses (3)

Requirements outside Department (21)

Courses must be from at least three of the participating departments.
ECON 380 - Comparative Economic Systems (3)
HIST 337 - History of Russia: 1682-1917 (3)
HIST 338 - History of Russia: 1917-Present (3)
HIST 419 - History of Marxist Thought and Writing (3)
POLS 365 - Government and Politics in Eastern Europe (3)
POLS 366 - Politics of Russia and Eurasia (3)
POLS 483 - Russian Foreign Policy (3)

Total Hours for Emphasis 2, Russian Studies: 46

Major in Spanish (B.A.)

Emphasis 1. Language and Literature

Requirements in Department (49)

FLSP 101 and FLSP 102[1] - Elementary Spanish I and II (6)
FLSP 201 and FLSP 202[1] - Intermediate Spanish I and II (6)
FLSP 211[1] - Intermediate Spanish Conversation (3),
OR FLSP 215 - Spanish Grammar for Spanish Speakers (3)
FLSP 301 - Advanced Spanish Grammar (3)
FLSP 311 - Advanced Spanish Conversation (3)
FLSP 320 - Intensive Reading and Introduction to Literary Analysis (3)
FLSP 321 - Masterpieces of Spanish Literature (3)
FLSP 322 - Masterpieces of Spanish-American Literature (3)
FLSP 411 - Advanced Composition in Spanish (3)
FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
Course work from 400-level Spanish literature courses (9)
Course work from other 400-level Spanish courses (6)

Total Hours for Emphasis 1, Language and Literature: 49

Emphasis 2. Translation and Business Spanish

Requirements in Department (49)

FLSP 101 and FLSP 102[1] - Elementary Spanish I and II (6)
FLSP 201 and FLSP 202[1] - Intermediate Spanish I and II (6)
FLSP 211[1] - Intermediate Spanish Conversation (3),
OR FLSP 215 - Spanish Grammar for Spanish Speakers (3
FLSP 301 - Advanced Spanish Grammar (3)
FLSP 311 - Advanced Spanish Conversation (3)
FLSP 320 - Intensive Reading and Introduction to Literary Analysis (3)
FLSP 321 - Masterpieces of Spanish Literature (3),
OR FLSP 322 - Masterpieces of Spanish-American Literature (3)
FLSP 411 - Advanced Composition in Spanish (3)
FLSP 412 - Applied Spanish Conversation (3)
FLSP 414 - Spanish Business Communications (3)
FLSP 461 - Spanish Civilization (3),
OR FLSP 462 - Spanish-American Civilization (3)
FLSP 480 - Introduction to Hispanic Linguistics (3),
OR FLSP 482 - Foundations in Spanish Sociolinguistics (3),
OR FLSP 485 - Spanish Syntax (3),
OR FLSP 486 - Contrastive Grammatical Structures in Spanish and English (3)
FLSP 483 - Techniques of Translation (3)
FLSP 484 - Advanced Translation (3)

[1] May be waived on the basis of high school preparation or placement examination

FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

Requirements outside Department (15)
MGMT 346 - Business Communication (3)
MKTG 310 - Principles of Marketing (3)
MKTG 367 - Principles of Global Marketing (3)
POLS 285 - Introduction to International Relations (3)
One of the following (3)
- MGMT 333 - Principles of Management (3)
- MKTG 325 - Buyer Behavior (3)
- MKTG 345 - Business Marketing (3)
- MKTG 348 - Integrated Marketing Communications (3)
- MKTG 350 - Principles of Selling (3)
- MKTG 355 - Direct Marketing (3)
- MKTG 365 - Principles of Retailing (3)
- MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business Spanish: 64

Teacher Certification

Students majoring in French, German, or Spanish who seek certification to teach at the middle-school or secondary level should consult with the coordinator of foreign language teacher development at the earliest possible date to plan their course work so as to meet all program requirements, in addition to university general education requirements.

Procedures

Declare a major in French, German, or Spanish with an emphasis in language and literature.

Consult with the departmental coordinator of teacher development at the time the major is declared and at the beginning of each semester thereafter.

Obtain approval of the departmental coordinator of teacher development for admission to teacher certification. Applicants to the French and German teacher certification programs must earn at least a grade of B in FLFR 302 or FLGE 302, respectively, to qualify for admission. Applicants in Spanish must earn at least a grade of B in FLSP 301 to qualify.

Consult each semester with the division coordinator for courses in the specific language major.

Retention

Maintain a minimum GPA of 2.75 in all work at NIU.

Maintain a minimum GPA of 3.00 in the foreign language major.

Requirements in Department[2]

For all majors: FLMT 401, FLMT 490, FLMT 491, and FLPT 485

For French majors: FLAL 483, FLFR 481, and FLFR 463, or FLFR 464

For German majors: FLGE 461, FLGE 462, or FLGE 463, and FLGE 481

For Spanish majors: FLSP 481, and FLSP 480 or FLSP 482 or FLSP 485 or FLSP 486 or FLAL 483, and FLSP 461 or FLSP 462

Requirements outside Department

For all majors: ENGL 207 - Fundamentals of English Grammar (3); KNPE 262 - First Aid and CPR (2); *PSYC 102 - Introduction to Psychology (3)

For French majors: ARTH 292 - Art History Survey II: 1150-1700 (3), or ARTH 293 - Art History Survey III: From 1700 (3), and HIST 312 - France Since 1815 (3)

For German majors: *ARTH 292 - Art History Survey II: 1150-1700 (3), or *ARTH 293 - Art History Survey III: From 1700 (3), and HIST 313 - Germany Since 1815 (3)

For Spanish majors: *ARTH 292 - Art History Survey II: 1150-1700 (3), or *ARTH 293 - Art History Survey III: From 1700 (3), or ARTH 376 - Latin American Art (3), and HIST 315 - Spain Since 1475 (3), or HIST 381 - Colonial Latin America (3), or HIST 382 - Modern Latin America (3)

Student Teaching

Students are ordinarily admitted to student teaching (FLPT 485) only upon application and after satisfactory completion of all other work required for graduation, including all other work in the major.

Professional Education Requirements

EPFE 400 - Foundations of Education (3),
OR EPFE 410 - Philosophy of Education (3)
EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
ETR 440 - Secondary Classroom Assessment (3)
FLMT 401 - Clinical Middle or Secondary School Experience in Foreign Languages (1-2)
ILAS 201 - Introductory Clinical Experience (1)
ILAS 301 - Second Clinical Experience (1-2)
TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)

Degree with Honors

Students who wish to earn a baccalaureate degree with honors in foreign languages and literatures must consult with the departmental honors adviser. To be eligible, students must have a minimum GPA of 3.50 in the major, a minimum university GPA of 3.00, and recommendations to the program by at least two professors in the Department of Foreign Languages and Literatures.

Honors in foreign languages and literatures requires the completion of a minimum of 3 hours of FLIS 482H, Honors Independent Study (3), which must be taken in the senior year and the maintenance of an overall minimum GPA of 3.00 and a GPA of 3.50 or above in the major.

Minors in Foreign Languages

Foreign language majors may complete minors in languages other than that of their major.

Minor in French (30)

FLFR 101 and FLFR 102[1] - Elementary French I and II (6)
FLFR 201 and FLFR 202[1] - Intermediate French I and II (6)
Course work from the following with advice and consent of adviser (18)
- FLFR 301 - Advanced French Grammar and Composition (3)
- FLFR 302 - Advanced French Grammar and Translation (3)
- FLFR 311 - Advanced French Conversation I (3)
- FLFR 312 - Advanced French Conversation II (3)
- FLFR 320 - *Analyse de Texte* (3)
- FLFR 321 - Masterpieces in French Literature I (3)
- FLFR 322 - Masterpieces in French Literature II (3)
- FLFR 323 - Special Topics in French Language, Literature, or Culture (3)

Six or more semester hours in the minor must be taken at NIU.

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* Available for general education credit.
[1] May be waived on the basis of high school preparation or placement examination
[2] These courses are in addition to those required of non-teacher certification majors with an emphasis in language and literature.

Minor in German (27)

FLGE 101 and FLGE 102[1] - Beginning German I and II (6)
FLGE 201 and FLGE 202[1] - Intermediate German I and II (6)
FLGE 301 - Advanced German Grammar and Composition I (3)
FLGE 302 - Advanced German Grammar and Composition II (3)
FLGE 311 - Advanced German Conversation (3)
FLGE 321 and FLGE 322 - Masterpieces of German Literature (6)

Six or more semester hours in the minor must be taken at NIU.

Minor in Italian (24)

FLIT 101 and FLIT 102[1] - Elementary Italian I and II (6)
FLIT 201 and FLIT 202[1] - Intermediate Italian I and II (6)
FLIT 301 - Advanced Italian Grammar and Composition (3)
FLIT 311 - Advanced Italian Conversation (3)
FLIT 321 - Masterpieces of Italian Literature (3)
FLIT 481 - Special Topics in Italian Literature (3),
OR FLIT 482 - Special Topics in Italian Linguistics (3)

Three hours from the following may be selected to substitute for either FLIT 301 or FLIT 311: ARTH 393, *ARTH 396, ENGL 318, or ENGL 483 (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Russian (24)

FLRU 101 and FLRU 102[1] - Elementary Russian I and II (6)
FLRU 201 and FLRU 202[1] - Intermediate Russian I and II (6)
FLRU 301 - Advanced Russian Grammar and Composition (3)
FLRU 311 - Russian Conversation and Composition (3)
FLRU 321 - Introduction to Russian Literature (3)
Elective from 400-level Russian courses (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Spanish (30)

FLSP 101 and FLSP 102[1] - Elementary Spanish I and II (6)
FLSP 201 and FLSP 202[1] - Intermediate Spanish I and II (6)
FLSP 211[1] - Intermediate Spanish Conversation (3),
OR FLSP 215 - Spanish Grammar for Spanish Speakers (3)
FLSP 301 - Advanced Spanish Grammar (3)
FLSP 311 - Advanced Spanish Conversation (3)
FLSP 320 - Intensive Reading and Introduction to Literary Analysis (3)
FLSP 321 - Masterpieces of Spanish Literature (3),
OR FLSP 322 - Masterpieces of Spanish-American Literature (3)
Elective from 400-level FLSP courses (3)

Six or more semester hours in the minor must be taken at NIU.

Course List

French (FLFR)

FLFR 101. ELEMENTARY FRENCH I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school French. Three hours of lecture and one hour of laboratory per week.

FLFR 102. ELEMENTARY FRENCH II (3). Continuation of FLFR 101. Three hours of lecture and one hour of laboratory per week. PRQ: FLFR 101 or one year of high school French and appropriate score on the placement test.

FLFR 201. INTERMEDIATE FRENCH I (3). Review of grammar, work in composition and the reading of modern French authors, to develop language mastery. PRQ: FLFR 102 or two years of high school French and appropriate score on the placement test.

FLFR 202. INTERMEDIATE FRENCH II (3). Further development of the skills of reading, writing, listening comprehension and speaking. Grammatical problems; reading of literary texts. Conducted in French. PRQ: FLFR 201 or three years of high school French and appropriate score on the placement test.

FLFR 301. ADVANCED FRENCH GRAMMAR AND COMPOSITION (3). Theory and practice of grammatical structure and stylistics. Practice in written French through the preparation of short compositions. PRQ: FLFR 202.

FLFR 302. ADVANCED FRENCH GRAMMAR AND TRANSLATION (3). Theory and practice of grammatical structure and stylistics. Introduction to skills and techniques of translation from French to English and English to French. PRQ: FLFR 202.

FLFR 311. ADVANCED FRENCH CONVERSATION I (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLFR 202.

FLFR 312. ADVANCED FRENCH CONVERSATION II (3). Continuation of intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLFR 311 or equivalent.

FLFR 320. *ANALYSE DE TEXTE* (3). Introduction to the principles of textual analysis and critical writing as applied to a variety of genres. PRQ: FLFR 202 or consent of department.

FLFR 321. MASTERPIECES IN FRENCH LITERATURE I (3). Study of authors and literary genres from the Middle Ages to the 17th Century. PRQ: FLFR 320 or consent of department.

FLFR 322. MASTERPIECES IN FRENCH LITERATURE II (3). Study of authors and literary genres from the 18th to the 20th century. PRQ: FLFR 320 or consent of department.

FLFR 323. SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE, OR CULTURE (3). Topics announced. PRQ: FLFR 320 or consent of department.

FLFR 371. MASTERPIECES OF FRENCH LITERATURE IN TRANSLATION (3). Study of masterpieces of French literature in translation from the Middle Ages to the modern period with emphasis on their social and cultural context; introduction to critical analysis.

FLFR 381. READING EXPOSITORY FRENCH I (3). Development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of French. S/U grading.

FLFR 382. READING EXPOSITORY FRENCH II (3). Continuation of FLFR 381. Open only to graduate students with credit for FLFR 381. S/U grading.

FLFR 411. ADVANCED COMPOSITION IN FRENCH (3). PRQ: FLFR 301 and FLFR 302, or consent of department.

FLFR 412. COMMERCIAL FRENCH (3). Practice in business and administrative correspondence in French. PRQ: FLFR 301 and FLFR 302, or consent of department. CRQ: MGMT 346 or consent of department.

FLFR 415. CONTEMPORARY FRENCH (3). Study of trends in modern spoken and written French and of contemporary uses of French. PRQ: FLFR 301, FLFR 302, and FLFR 312, or consent of department.

FLFR 431. 17TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 433. 18TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 435. 19TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 438. 20TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 441. MEDIEVAL FRENCH LITERATURE (3). Literary expression in France to the end of the 15th century, with emphasis on the 12th and 13th centuries. PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

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* Available for general education credit.
[1] May be waived on the basis of high school preparation or placement examination

FLFR 443. FRENCH LITERATURE OF THE RENAISSANCE (3). PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 445. FRENCH WOMEN WRITERS (3). Works of selected French women writers from the Middle Ages to the present. PRQ: FLFR 321, FLFR 322, or FLFR 323, or consent of department.

FLFR 463. *LA FRANCE CONTEMPORAINE* (3). Political, social, and cultural development of France since 1945. PRQ: FLFR 302 and FLFR 312, or consent of department.

FLFR 464. PARIS: CITY OF LIGHTS (3). Study of urban changes in Paris from the Middle Ages to the present. PRQ: FLFR 302 and FLFR 312, or consent of department.

FLFR 481. FRENCH PHONETICS AND PHONEMICS (3). PRQ: FLFR 302 and FLFR 312, or consent of department.

FLFR 482. HISTORY OF THE FRENCH LANGUAGE (3). Internal development of the French language from its origins to the present with considerations of external social influences. Attention given to the relationship of French to the other Romance languages through elements of phonology, morphology, syntax, and vocabulary. PRQ: FLFR 302, FLFR 312, and FLFR 322, or consent of department.

FLFR 483. *THEME ET VERSION* (3). Translation of selected literary passages, alternating between French and English. PRQ: FLFR 302 or consent of department.

FLFR 484. ADVANCED TRANSLATION (3). Intensive training in accurate translation of business, administrative, and technical texts. PRQ: FLFR 302 or consent of department.

FLFR 485. INITIATION TO CONSECUTIVE TRANSLATION (3). Initiation to the tools, methodology, and terminology of consecutive translation. PRQ: FLFR 415 and FLFR 484, or consent of department

Italian (FLIT)

FLIT 101. ELEMENTARY ITALIAN I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school Italian. Three hours of lecture and one hour of laboratory per week.

FLIT 102. ELEMENTARY ITALIAN II (3). Continuation of FLIT 101. One 1-hour laboratory period a week. PRQ: FLIT 101 or one year of high school Italian and appropriate score on the placement test.

FLIT 201. INTERMEDIATE ITALIAN I (3). Review of grammar, work in composition and the reading of modern Italian authors, to develop language mastery. PRQ: FLIT 102 or two years of high school Italian and appropriate score on the placement test.

FLIT 202. INTERMEDIATE ITALIAN II (3). Further development of the skills of reading, writing, listening comprehension and speaking. Grammatical problems; reading of literary texts. Conducted in Italian. PRQ: FLIT 201 or three years of high school Italian and appropriate score on the placement test.

FLIT 272. THE ITALIAN RENAISSANCE (3). Birth of humanism and its contribution to Western thought through the literature of Italy during the Renaissance. Some attention given to painting, sculpture, and music. No knowledge of Italian required.

FLIT 301. ADVANCED ITALIAN GRAMMAR AND COMPOSITION (3). PRQ: FLIT 202 or equivalent.

FLIT 311. ADVANCED ITALIAN CONVERSATION (3). Practical training in conversational skills to achieve fluency of expression. PRQ: FLIT 202 or equivalent.

FLIT 321. MASTERPIECES OF ITALIAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLIT 202 or equivalent.

FLIT 381. READING EXPOSITORY ITALIAN I (3). Development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of Italian. S/U grading.

FLIT 382. READING EXPOSITORY ITALIAN II (3). Continuation of FLIT 381. Open only to graduate students with credit for FLIT 381. S/U grading.

FLIT 481. SPECIAL TOPICS IN ITALIAN LITERATURE (3). Study of a major author, genre, theme, period, or literary movement. Topics announced. PRQ: FLIT 321 or equivalent.

FLIT 482. SPECIAL TOPICS IN ITALIAN LINGUISTICS (3). Focus on linguistic topics such as the history of the Italian language, Italian dialectology, or Italian structure. PRQ: FLIT 301 and FLIT 311 or equivalent.

Spanish (FLSP)

Except as noted below in some course descriptions, all Spanish classes are conducted exclusively in Spanish.

FLSP 101. ELEMENTARY SPANISH I (3). Fundamentals of grammar, composition, conversation, and culture. Intended for students with less than one year of high school Spanish. Three hours of lecture. Weekly work required in the Language Learning Center. Conducted in Spanish.

FLSP 102. ELEMENTARY SPANISH II (3). Continuation of FLSP 101. Weekly work required in the Language Learning Center. Conducted in Spanish. PRQ: FLSP 101 or one year of high school Spanish and appropriate score on the placement test.

FLSP 109. INTRODUCTION TO SPANISH FOR HEALTH CARE PROFESSIONALS (3). Medical Spanish for health care professionals including Hispanic cultural background and language skills, with emphasis on medical vocabulary. Although no previous knowledge of Spanish required, conducted primarily in Spanish.

FLSP 201. INTERMEDIATE SPANISH I (3). Further development of grammar, composition, reading, and cultural awareness to increase language mastery. Weekly work required in the Language Learning Center. Conducted in Spanish. PRQ: FLSP 102 or two years of high school Spanish and appropriate score on the placement test.

FLSP 202. INTERMEDIATE SPANISH II (3). Further development of the skills of reading, writing, listening comprehension and speaking. Grammatical problems; reading of literary and non-literary texts. Conducted in Spanish. Weekly work required in the Language Learning Center. PRQ: FLSP 201 or three years of high school Spanish and appropriate score on the placement test.

FLSP 209. INTERMEDIATE SPANISH FOR HEALTH CARE PROFESSIONALS (3). Medical Spanish for health care professionals including Hispanic cultural background and language skills, which builds on FLSP 109. Conducted primarily in Spanish. PRQ: FLSP 109 or consent of department.

FLSP 211. INTERMEDIATE SPANISH CONVERSATION (3). Conversational practice. Drill in correct pronunciation, articulation and intonation. Vocabulary and idiom study–conducted in Spanish. Not available for credit to native speakers of Spanish. PRQ: FLSP 201 or three years of high school Spanish and appropriate score on the placement test.

FLSP 215. SPANISH GRAMMAR FOR SPANISH SPEAKERS (3). For native speakers of Spanish. Emphasis on understanding grammatical concepts and terminology, recognition of grammatical forms and structures, and understanding their use to communicate meaning. Attention also given to conventions of orthography. Taught in Spanish. Not available to persons with prior credit in FLSP 202 or FLSP 301. May be used to satisfy the foreign language requirement for the B.A. degree. PRQ: Consent of department.

FLSP 301. ADVANCED SPANISH GRAMMAR (3). PRQ: FLSP 202 or FLSP 215, or equivalent.

FLSP 311. ADVANCED SPANISH CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLSP 211 or FLSP 215.

FLSP 320. INTENSIVE READING AND INTRODUCTION TO LITERARY ANALYSIS (3). Introduction to the principles of literary analysis and critical writing, reading skills, and vocabulary building, through selected readings in Spanish and Latin American literature in prose narrative, poetry, and drama. PRQ: FLSP 202 or FLSP 215.

FLSP 321. MASTERPIECES OF SPANISH LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

FLSP 322. MASTERPIECES OF SPANISH-AMERICAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

FLSP 380. INTRODUCTION TO SPANISH LANGUAGE AND BUSINESS PRACTICES (3). Basic introduction to Spanish/Latin American business etiquette, language, and practices. No previous knowledge of Spanish required. Cannot be used in Spanish major or minor.

FLSP 381. READING EXPOSITORY SPANISH I (3). Development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of Spanish. S/U grading.

FLSP 382. READING EXPOSITORY SPANISH II (3). Continuation of FLSP 381. Open only to graduate students with credit for FLSP 381. S/U grading.

FLSP 411. ADVANCED COMPOSITION IN SPANISH (3). PRQ: FLSP 301 or equivalent.

FLSP 412. APPLIED SPANISH CONVERSATION (3). Development of conversational skills applied to occupational situations dealing with native Spanish speakers. PRQ: FLSP 311.

FLSP 414. SPANISH BUSINESS COMMUNICATIONS (3). Practice in contemporary business and administrative communications and correspondence in Spanish. PRQ: FLSP 411.

FLSP 431. SPANISH GOLDEN AGE POETRY (3) Study and analysis of the major poetic works of the Spanish 16th and 17th centuries. Includes Spanish Petrarchists of the Renaissance, "Mannerist" and Baroque periods, including some of the greatest poets of all Spanish literature. PRQ: FLSP 321.

FLSP 432. MEDIEVAL SPANISH LITERATURE (3). Through the 15th century. PRQ: FLSP 321.

FLSP 433. CLASSICAL SPANISH DRAMA (3). PRQ: FLSP 321.

FLSP 434. CERVANTES: THE QUIXOTE (3). PRQ: FLSP 321.

FLSP 435. SPANISH GOLDEN AGE PROSE (3). Study and analysis of the prose of the Spanish Golden Age, including the chivalric, picaresque, and mystic genres. Includes the works of Miguel de Cervantes (with the exception of *Don Quixote*). PRQ: FLSP 321.

FLSP 436. SPANISH ROMANTICISM AND REALISM (3). PRQ: FLSP 321.

FLSP 437. THE GENERATION OF 1898 (3). PRQ: FLSP 321.

FLSP 438. CONTEMPORARY SPANISH LITERATURE (3). PRQ: FLSP 321.

FLSP 440. SPANISH AMERICAN POETRY AND THEATER (3). Critical study of poetry and theater as literary genres; in-depth study of representative works which may date from the period of European contact to the present day. PRQ: FLSP 322 or consent of department.

FLSP 441. SPANISH AMERICAN NOVEL (3). Critical study of the novel as genre, accompanied by an in-depth study of representative works by Spanish American writers of the 19th, 20th, and 21st centuries. PRQ: FLSP 322 or consent of department.

FLSP 445. LATIN AMERICAN WOMEN WRITERS (3). General study of the works of Latin American women writers and the evolution of feminist thought in Latin America. PRQ: FLSP 322 or consent of department.

FLSP 451. LITERATURE OF THE ANDEAN REPUBLICS (3). General treatment of the literature of Peru, Ecuador, and Bolivia with emphasis on the 20th century. PRQ: FLSP 322.

FLSP 452. LITERATURE OF THE CARIBBEAN (3). General treatment of the literature of Colombia, Venezuela, Central America, and the Spanish-speaking West Indies with emphasis on the 19th and 20th centuries. PRQ: FLSP 322.

FLSP 453. LITERATURE OF URUGUAY, ARGENTINA AND CHILE (3). General treatment of the regional literature of the River Plate republics and Chile, with emphasis on the period since 1914. PRQ: FLSP 322.

FLSP 454. MEXICAN LITERATURE (3). General treatment of Mexican literature, with emphasis on the 20th century. PRQ: FLSP 322.

FLSP 455. SPANISH-AMERICAN SHORT STORY (3). General treatment of this genre in the various Spanish-American countries including different authors, with emphasis on the 20th century. PRQ: FLSP 322.

FLSP 456. COLONIAL LATIN AMERICAN LITERATURE (3). General treatment of literature of Spanish America during the colonial period (before 1900), including pre-Columbian literature. PRQ: FLSP 322.

FLSP 457. 19TH CENTURY SPANISH AMERICAN LITERATURE (3). Adaptation and development of periods such as romanticism, realism, and naturalism in the Spanish American cultural context, involving issues such as the politics of national identity and the effect of language and history. PRQ: FLSP 322 or consent of department.

FLSP 458. SPANISH AMERICAN MODERNISMO AND VANGUARDIAS: 1880-1945 (3). Overview of Latin American poetry and prose from 1880 to 1945, focusing on issues such as the influence of modernity, the politics of literary expression, and the artistic movements in Europe that led Spanish American writers to define their role in a globalized world. PRQ: FLSP 322 or consent of department.

FLSP 459. SPANISH AMERICAN HISTORICAL NOVELS (3). Study of historical novels depicting such important events from the history of Spanish America as the discovery and conquest, the wars of independence, and other important historical events or time periods. Issues of verisimilitude, historical and historiographical criticism, and the concept of history. PRQ: FLSP 322 or consent of department.

FLSP 460. CONTEMPORARY SPANISH AMERICAN LITERATURE (3). Spanish American prose, poetry, and theater from 1945 to the present. PRQ: FLSP 322 or consent of department.

FLSP 461. SPANISH CIVILIZATION (3). Development of the Spanish pattern of civilization from pre-Roman times to the present. PRQ: FLSP 321 or FLSP 322.

FLSP 462. SPANISH-AMERICAN CIVILIZATION (3). Evolution of the Spanish-American pattern of civilization from the pre-Hispanic period to the present. PRQ: FLSP 321 or FLSP 322.

FLSP 480. INTRODUCTION TO HISPANIC LINGUISTICS (3). Introduction to core areas of the linguistic study of Spanish language: phonology, morphology, syntax, semantics, history of the language, and dialectology. Provides necessary background for advanced studies in Spanish linguistics or general linguistics. PRQ: FLSP 301, or consent of department.

FLSP 481. SPANISH PHONOLOGY (3). Introduction to the sound patterns of the Spanish language and the linguistic principles underlying them. Focus on how these patterns and principles apply across languages of the world as well as on the normative rules of pronunciation. PRQ: FLSP 311 or consent of department.

FLSP 482. FOUNDATIONS IN SPANISH SOCIOLINGUISTICS (3). Introduction to basic principles of Spanish sociolinguistics. Provides necessary background for advanced studies in Spanish sociolinguistics. PRQ: FLSP 480.

FLSP 483. TECHNIQUES OF TRANSLATION (3). Development of skill and techniques of translation from Spanish to English and English to Spanish. PRQ: FLSP 411.

FLSP 484. ADVANCED TRANSLATION (3). Intensive training in accurate and idiomatic translation of business, administrative, and technical texts from Spanish to English and English to Spanish. PRQ: FLSP 483 or consent of department.

FLSP 485. SPANISH SYNTAX (3). Introduction to the patterns of sentence structure of the Spanish language and the linguistic principles underlying them. Emphasis on the functionality of syntactical patterns and their relationship to normative rules of writing. PRQ: FLSP 411 or consent of department.

FLSP 486. CONTRASTIVE GRAMMATICAL STRUCTURES IN SPANISH AND ENGLISH (3). Provides knowledge of basic structural differences between Spanish and English. Taught in both languages to demonstrate fundamental interrelationships between the two languages. Emphasis on sensitivity to language interference and other problems of language acquisition. PRQ: FLSP 301.

FLSP 487. HISPANIC DIALECTOLOGY (3). Introduction to the study of variation within the Spanish language in both Spain and the Americas. Focus on the intricate mix of social, political, and historical factors that underlie the natural processes of dialect formation, bilingualism,

and multilingualism across linguistic communities around the world. PRQ: FLSP 320 and either FLSP 480 or FLSP 481, or consent of department.

FLSP 491. HISTORY OF THE SPANISH LANGUAGE (3). Introduction to the origin and evolution of the Spanish language. Emphasis on the phonetic, phonological, and morphosyntactic changes that Latin underwent and eventually gave rise to the Spanish language and on the social, political, and historical circumstances that have shaped the map of the Spanish-speaking world. PRQ: FLSP 320 and either FLSP 480 or FLSP 481, or consent of department.

Portugese (FLPO)

FLPO 103. BEGINNING PORTUGUESE I (5). Development of skills in comprehension, speaking, reading, and writing, with emphasis on the auraloral skills. Supplementary work in the language laboratory.

FLPO 104. BEGINNING PORTUGUESE II (5). Continuation of FLPO 103. PRQ: FLPO 103.

FLPO 201. INTERMEDIATE PORTUGUESE I (3). Deepening and broadening of students' knowledge of the Portuguese grammatical structure and lexicon and of Luso-Brazilian culture in general. Brazilian Portuguese stressed. PRQ: FLPO 104 or consent of department.

FLPO 202. INTERMEDIATE PORTUGUESE II (3). Continuation of FLPO 201. PRQ: FLPO 201 or consent of department.

FLPO 461. BRAZILIAN CIVILIZATION (3). Contributions of the African and Indian to the history and literature of Brazil. Classes conducted in English with English and Portuguese bibliography.

German (FLGE)

FLGE 101. BEGINNING GERMAN I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school German. Three hours of lecture and one hour of laboratory per week.

FLGE 102. BEGINNING GERMAN II (3). Continuation of FLGE 101. Three hours of lecture and one hour of laboratory per week. PRQ: FLGE 101 or one year of high school German and appropriate score on the placement test.

FLGE 103. BEGINNING GERMAN CONVERSATION(1 to 2). German conversation at the elementary level. PRQ: FLGE 101. CRQ: FLGE 102.

FLGE 201. INTERMEDIATE GERMAN I (3). Review of grammar, structure, and syntax. Reading and discussion of prose, poetry, and drama, with practice in speaking and writing. Generally appropriate for those with two or three years of German in high school, but placement examination is required. PRQ: FLGE 102.

FLGE 202. INTERMEDIATE GERMAN II (3). Continuation of FLGE 201. PRQ: FLGE 201.

FLGE 203. INTERMEDIATE GERMAN CONVERSATION(1 to 2). Continuation of FLGE 103. PRQ: FLGE 102, FLGE 103, and FLGE 201. CRQ: FLGE 202 or consent of department.

FLGE 301. ADVANCED GERMAN GRAMMAR AND COMPOSITION I (3). Theory and practice of grammatical structure and stylistics. Emphasis on points of conflict between English and German. Stylistic exercises in subtleties of expression. Practice in written German through the preparation of short compositions. PRQ: FLGE 202.

FLGE 302. ADVANCED GERMAN GRAMMAR AND COMPOSITION II (3). Continuation of FLGE 301. Emphasis on style in the written language. PRQ: FLGE 301 or consent of department.

FLGE 311. ADVANCED GERMAN CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLGE 202 or consent of department.

FLGE 321/FLGE 322. MASTERPIECES OF GERMAN LITERATURE (3, 3). Reading and analysis of poetry, drama, and prose representative of the main currents of German literature from the Middle Ages with emphasis on the 18th, 19th, and 20th centuries. PRQ: FLGE 202.

FLGE 380. INTRODUCTION TO GERMAN LANGUAGE AND BUSINESS PRACTICES (3). Includes German business etiquette, language, and practices. No previous knowledge of German required. Cannot be used in German major or minor.

FLGE 381. READING EXPOSITORY GERMAN I (3). Development of reading skills through the study of grammar and vocabulary. Translation and discussion of representative texts in the humanities, sciences, and social sciences as appropriate. Open only to graduate students with no prior knowledge of German. S/U grading.

FLGE 382. READING EXPOSITORY GERMAN II (3). Continuation of FLGE 381. Open only to graduate students with credit for FLGE 381. S/U grading.

FLGE 411. MODERN GERMAN (3). Current usages in spoken and written German with emphasis on contemporary vocabulary, idiomatic expressions, and syntax. In German. PRQ: FLGE 311 or consent of department.

FLGE 412. BUSINESS GERMAN I (3). Techniques of spoken and written communication necessary in the business world. Discussion of basic features of the export-oriented German economy. PRQ: FLGE 411 or consent of department.

FLGE 414. BUSINESS GERMAN II (3). Advanced practice in business communication, with analysis of authentic contemporary materials. Preparation for the optional *Prüfung Wirtschaftsdeutsch International* offered by the Goethe Institute on an annual basis. Lectures, exercises, films. PRQ: FLGE 412 or consent of department.

FLGE 432. ENLIGHTENMENT, THROUGH WEIMAR CLASSICISM (3). Literary, philosophical, and political experience of Germany in the 18th century as reflected in the works of Lessing, Herder, Wieland, Goethe, Schiller, and others. PRQ: FLGE 321, FLGE 322, or consent of department.

FLGE 433. GERMAN ROMANTICISM (3). Background, theory, and major literary texts of German Romanticism. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 434. GERMAN REALISM AND NATURALISM (3). Realism and naturalism in 19th century Germany as reflected in the prose, poetry, and drama of Stifter, Keller, Hebbel, Storm, Fontane, Hauptmann, and others. PRQ: FLGE 321, FLGE 322, or consent of department.

FLGE 435. MODERN GERMAN LITERATURE (3). Literary trends from 1890 to 1945, including impressionism, neo-romanticism, expressionism, the new realism of the Weimar Republic, the Third Reich, the Inner Emigration, and the Other Germany in exile. Includes representative writers such as Wedekind, Schnitzler, Hofmannsthal, Rilke, Thomas Mann, Kafka, Hesse, and Brecht. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 437. CONTEMPORARY GERMAN LITERATURE (3). German literature from 1945 to the present, including the postwar period, the East-West division of the Cold War, and the conflicts since the reunification of 1990, but also the separate developments in Austria and Switzerland. Texts by such representative writers as H. Boll, G. Grass, C. Wolf, and others. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 461. GERMAN CULTURE AND CIVILIZATION 800-1832 (3). Social and cultural developments in the German-speaking lands from 800 to 1832. Taught in German. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 462. GERMAN CULTURE AND CIVILIZATION 1832-1945 (3). Critical approach to German culture and society from 1832-1945 with emphasis on the Wilhelminian era, the Weimar Republic, and the Third Reich. Analysis of essential texts and the lives of representative Germans. Lectures, discussions, films. Taught in German. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 463. DEUTSCHLAND HEUTE (3). Critical approach to postwar and contemporary German culture, society, and everyday life from 1945 to the present, with emphasis on the developments since the reunification of 1990. Analysis of essential texts and the lives of representative Germans. Lectures, discussions, films. Taught in German. PRQ: FLGE 321 and FLGE 322, or consent of department.

FLGE 481. THE STRUCTURE OF MODERN GERMAN (3). Survey of Modern German and the use of contemporary linguistic methods to analyze and contrast its major structures and their functions. PRQ: FLGE 302 or consent of department.

FLGE 482. TECHNIQUES OF TRANSLATION I (3). Development of skills and techniques of translation of a variety of text types from German to English and English to German. PRQ: FLGE 301 or consent of department.

FLGE 484. TECHNIQUES OF TRANSLATION II (3). Intensive training in accurate and idiomatic translation from German to English and English to German with emphasis on administrative, political, and technical texts. PRQ: FLGE 302 or consent of department.

FLGE 485. HISTORY OF THE GERMAN LANGUAGE (3). Survey of the German language from its origins to the present with a consideration of the political, social, and literary forces influencing the language. Topics include grammar and phonology, and the relationship of German to other languages and to older Germanic dialects. PRQ: FLGE 302 or consent of department.

Classic Languages (FLCL)

FLCL 101. ELEMENTARY LATIN I (3). Grammar and simple readings from Latin authors. Intended for students with no more than one year of high school Latin.

FLCL 102. ELEMENTARY LATIN II (3). Continuation of FLCL 101. PRQ: FLCL 101 or consent of department.

FLCL 103. BEGINNING ANCIENT GREEK I (3). Introduction to ancient Greek, comprising fundamentals of alphabet, grammar, structure, syntax, and simple readings.

FLCL 104. BEGINNING ANCIENT GREEK II (3). Continuation of FLCL 103. PRQ: FLCL 103 or consent of department.

FLCL 201. INTERMEDIATE LATIN I (3). Review of grammar, work in composition, and the reading of Latin authors. Generally appropriate for those with two or three years of Latin in high school. PRQ: FLCL 102.

FLCL 202. INTERMEDIATE LATIN II (3). Continuation of FLCL 201. PRQ: FLCL 201.

FLCL 203. INTERMEDIATE ANCIENT GREEK I (3). Review of grammar, work in composition, and reading of Greek authors. Generally appropriate for those with two or three years of Greek in high school. PRQ: FLCL 104.

FLCL 204. INTERMEDIATE ANCIENT GREEK II (3). Continuation of FLCL 203. PRQ: FLCL 203.

FLCL 271. CLASSICAL MYTHOLOGY (3). Study of gods and heroes of ancient Greece and Rome.

FLCL 481. SPECIAL TOPICS IN CLASSICAL LITERATURE AND CIVILIZATION (3). Study of a major classical author, genre, theme, cultural period, or cultural phenomenon. Topics announced. May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Consent of department.

FLCL 483. DIRECTED READINGS IN CLASSICAL LANGUAGES (1 to 3). Independent study of a classical author under the direction of a professor. May be repeated to a maximum of 6 semester hours. PRQ: Two years of college Latin or Greek or equivalent, or consent of department.

Russian (FLRU)

FLRU 101. ELEMENTARY RUSSIAN I (3). Fundamentals of grammar, composition, and conversation. Intended for students with less than one year of high school Russian. Three hours of lecture and one hour of laboratory per week.

FLRU 102. ELEMENTARY RUSSIAN II (3). Continuation of FLRU 101. Three hours of lecture and one hour of laboratory per week. PRQ: FLRU 101 or one year of high school Russian and appropriate score on the placement test.

FLRU 201. INTERMEDIATE RUSSIAN I (3). Work in conversation, composition, and the reading of modern Russian authors to develop language mastery. PRQ: FLRU 102 or two years of high school Russian and appropriate score on the placement test, or consent of department.

FLRU 202. INTERMEDIATE RUSSIAN II (3). Further development of aural-oral skills, and reading of modern Russian authors. PRQ: FLRU 201 or three years of high school Russian and appropriate score on the placement test, or consent of department.

FLRU 211. INTERMEDIATE RUSSIAN CONVERSATION (2). PRQ: FLRU 102 or equivalent.

FLRU 261. RUSSIAN CULTURE AND LITERATURE (3). Comprehensive introduction to ancient and modern Russian culture and literature as a major part of Western civilization. Taught in English.

FLRU 301. ADVANCED RUSSIAN GRAMMAR AND COMPOSITION (3). PRQ: FLRU 202 or consent of department.

FLRU 311. RUSSIAN CONVERSATION AND COMPOSITION (3). Intensive practical training in spoken and written Russian. PRQ: FLRU 202 or consent of department.

FLRU 321. INTRODUCTION TO RUSSIAN LITERATURE (3). Introduction to literary analysis, based upon works chosen from the 19th and 20th centuries representing the principal genres. Taught in English.

FLRU 412. BUSINESS RUSSIAN (3). Techniques of spoken and written communication necessary to doing business in post-Soviet Russia, with attention to linguistic etiquette. PRQ: FLRU 301 or consent of department.

FLRU 431. 19TH CENTURY RUSSIAN LITERATURE (3). Readings, lectures, and discussion of classic writers in various genres. Taught in English.

FLRU 432. RUSSIAN LITERATURE AND CULTURE (3). Readings, lectures, and discussion of works chosen on the basis of their genre or particular thematic content. Taught in English.

FLRU 433. RUSSIAN MODERNIST LITERATURE: 1881-1930 (3). Readings, lectures, and discussion of masterpieces of the modernist period. Taught in English.

FLRU 434. 20TH CENTURY RUSSIAN LITERATURE (3). Readings, lectures, and discussion of works by major authors of the 20th century in various genres. Taught in English.

FLRU 461. CONTEMPORARY RUSSIAN CULTURE (3). Application of student's linguistic skills in areas of topical interest relating to Soviet culture. Better understanding of contemporary Soviet culture acquired by following closely, and analyzing, media coverage of current events of cultural interest. PRQ: FLRU 301 or consent of department.

FLRU 480. MODERN RUSSIAN (3). Advanced study of contemporary Russian. Emphasis on development of reading, writing and speaking skills, and translation techniques with recent material from science, economics, politics, and the arts. PRQ: FLRU 301 or consent of department.

Polish (FLPL)

FLPL 101. ELEMENTARY POLISH I (3). Fundamentals of grammar, composition, conversation, and culture. Intended for students with less than one year of high school Polish. Three hours per week with additional participation time in the Foreign Language Learning Center required.

FLPL 102. ELEMENTARY POLISH II (3). Continuation of FLPL 101. Three hours per week with additional participation time in the Foreign Language Learning Center required. PRQ: FLPL 101 or one year of high school Polish and appropriate score on placement test.

FLPL 201. INTERMEDIATE POLISH I (3). Further development of skills in grammar, composition, reading, and cultural awareness to increase language mastery. Three hours per week with additional participation time in the Foreign Language Learning Center required. PRQ: FLPL 102 or two years of high school Polish and appropriate score on placement test.

FLPL 202. INTERMEDIATE POLISH II (3). Further development of skills in reading, writing, listening comprehension, and speaking. Grammatical problems; reading of literary texts. Conducted in Polish. Three hours per week with additional participation time in the Foreign Language Learning Center required. PRQ: FLPL 201 or three years of high school Polish and appropriate score on placement test.

FLPL 301. ADVANCED POLISH GRAMMAR AND COMPOSITION (3). Broaden pre-existing language skills by practicing advanced communication and grammar. Intensive practical training in conversational skills, emphasizing competence in understanding and translating as well as the development of written and oral expression. PRQ: FLPL 202 or consent of department.

FLPL 302. ADVANCED POLISH COMPOSITION AND CONVERSATION (3). Continuation of FLPL 301. Various aspects of modern Polish based on examples from literature, journalism, and film. Intensive practical training in spoken Polish, emphasis on style in the written language. PRQ: FLPL 301 or consent of department.

FLPL 361. INTRODUCTION TO POLISH CULTURE (3). Polish culture and ideology from the beginning of the Polish state to modern times. Taught in English.

FLPL 363. BUSINESS POLISH (3). Conversational and written business Polish as well as the current business practices in Poland. May include guest speakers from the Polish-American business

community. Taught primarily in Polish. PRQ: FLPL 302 or consent of department.

FLPL 385. MODERN POLAND (3). Contemporary Poland through a study of politics, culture, arts, and Poland as a part of the European Union and NATO. Taught primarily in Polish. PRQ: FLPL 301 or consent of department.

Japanese (FLJA)

FLJA 101. BEGINNING JAPANESE I (3). Developing skills in listening, speaking, reading, and writing.

FLJA 102. BEGINNING JAPANESE II (3). Continuation of FLJA 101. PRQ: FLJA 101 or consent of department.

FLJA 201. INTERMEDIATE JAPANESE I (3). Review of grammar, work in composition, and the readings of modern Japanese prose to develop language mastery. PRQ: FLJA 102 or consent of department.

FLJA 202. INTERMEDIATE JAPANESE II (3). Continuation of FLJA 201. PRQ: FLJA 201 or consent of department.

FLJA 301. ADVANCED JAPANESE GRAMMAR AND COMPOSITION I (3). Readings in simple expository Japanese, with emphasis on literature. *Kanji* learning, vocabulary building, grammar, and reading skills. PRQ: FLJA 202 or consent of department.

FLJA 302. ADVANCED JAPANESE GRAMMAR AND COMPOSITION II (3). Continuation of FLJA 301. PRQ: FLJA 301 or consent of department.

FLJA 311. ADVANCED JAPANESE CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLJA 202 or equivalent.

FLJA 321. INTRODUCTION TO JAPANESE LITERATURE (3). Introduction to literary analysis of Japanese modern literature in translation. Covers major authors of the 19th and 20th centuries. Taught in English.

FLJA 362. INTRODUCTION TO JAPANESE CULTURE (3). Comprehensive introduction to Japanese culture and ideology, from ancient to modern times. Taught in English.

FLJA 381. INTRODUCTION TO JAPANESE LANGUAGE AND BUSINESS PRACTICES (3). Includes Japanese business culture and etiquette.

FLJA 411. MODERN JAPANESE (3). Review and improvement of reading and writing skills. Readings center around modern newspaper and periodical material. *Kanji,* vocabulary, grammar, and writing exercises. PRQ: FLJA 301 and FLJA 302, or consent of department.

Korean (FLKN)

FLKN 103. BEGINNING KOREAN I (5). Proficiency-based introduction to speaking, reading, and writing Modern Korean. Emphasis on oral proficiency and on the acquisition of reading and writing skills. Designed for students with little or no background in Korean.

FLKN 104. BEGINNING KOREAN II (5). Continuation of FLKN 103. PRQ: FLKN 103 or consent of department.

Arabic (FLAR)

FLAR 103. BEGINNING ARABIC I (5). Proficiency-based introduction to speaking, reading, and writing Modern Standard Arabic.

FLAR 104. BEGINNING ARABIC II (5). Continuation of FLAR 103. PRQ: FLAR 103 or consent of department

Asian Languages

FLBU 103. BEGINNING BURMESE I (5). Developing skills in listening, speaking, reading, and writing.

FLBU 104. BEGINNING BURMESE II (5). Continuation of FLBU 103. PRQ: FLBU 103 or consent of department.

FLBU 203. INTERMEDIATE BURMESE I (5). Developing skills in listening, speaking, reading, and writing. PRQ: FLBU 104 or consent of department.

FLBU 204. INTERMEDIATE BURMESE II (5). Developing skills in listening, speaking, reading, and writing. PRQ: FLBU 203 or consent of department.

FLCH 101. BEGINNING CHINESE I (3). Developing skills in listening, speaking, reading, and writing.

FLCH 102. BEGINNING CHINESE II (3). Continuation of FLCH 101. PRQ: FLCH 101 or consent of department.

FLCH 201. INTERMEDIATE CHINESE I (3). Review of grammar, work in composition, and the readings of modern Chinese authors to develop language mastery. PRQ: FLCH 102 or consent of department.

FLCH 202. INTERMEDIATE CHINESE II (3). Review of grammar, work in composition, and the readings of modern Chinese authors to develop language mastery. PRQ: FLCH 201 or consent of department.

FLCH 311. ADVANCED CHINESE CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLCH 202 or equivalent.

FLCH 320. ADVANCED CHINESE READING (3). Intensive practical training in Chinese reading. Readings center around modern newspapers, periodicals, and other Chinese writing. PRQ: FLCH 202 or consent of department.

FLCH 361. INTRODUCTION TO CHINESE CULTURE (3). Comprehensive introduction to Chinese culture, from ancient to modern times. Taught in English.

FLCH 381. INTRODUCTION TO CHINESE LANGUAGE AND BUSINESS PRACTICES (3). Basic language course with a general introduction to Chinese business etiquette and practices from the cultural perspective.

FLIN 103. BEGINNING INDONESIAN I (5). Developing skills in listening, speaking, reading, and writing.

FLIN 104. BEGINNING INDONESIAN II (5). Continuation of FLIN 103. PRQ: FLIN 103 or consent of department.

FLIN 203. INTERMEDIATE INDONESIAN I (5). Continuation of developing skills in listening, speaking, reading, and writing. PRQ: FLIN 104.

FLIN 204. INTERMEDIATE INDONESIAN II (5). Continuation of FLIN 203. PRQ: FLIN 203.

FLIN 421. INTRODUCTION TO INDONESIAN LITERATURE (3). Survey of the development of Indonesian literature. Selected readings in regional languages in translation using traditional and contemporary Indonesian literature. PRQ: FLIN 204.

FLTA 103. BEGINNING TAGALOG I (5). Developing skills in listening, speaking, reading, and writing.

FLTA 104. BEGINNING TAGALOG II (5). Continuation of FLTA 103. PRQ: FLTA 103 or consent of department.

FLTA 203. INTERMEDIATE TAGALOG I (3). Designed for students with some knowledge of Tagalog who want to develop fluency in spoken and written Tagalog and understand and articulate Tagalog linguistic features to at least the intermediate-high level. Emphasis on speaking and listening comprehension, but reading and writing Tagalog will be an integral part of instruction. PRQ: FLTA 104 or consent of department.

FLTA 204. INTERMEDIATE TAGALOG II (3). Continuation of FLTA 203. PRQ: FLTA 203 or consent of department.

FLTH 103. BEGINNING THAI I (5). Developing skills in listening, speaking, reading, and writing.

FLTH 104. BEGINNING THAI II (5). Continuation of FLTH 103. PRQ: FLTH 103 or consent of department.

FLTH 203. INTERMEDIATE THAI I (5). Training to increase proficiency in spoken Thai beyond the elementary level; reading selections for practice in comprehension of the written language; and composition practice. PRQ: FLTH 104.

FLTH 204. INTERMEDIATE THAI II (5). Continuation of FLTH 203. PRQ: FLTH 203.

General

FLAL 400. DESIGN AND CREATION OF ELECTRONIC PORTFOLIOS FOR FOREIGN LANGUAGE MAJORS (1). Designed to assist foreign language majors in the construction of their required electronic portfolios. Uses of a variety of multimedia technologies to maintain authentic samples of student work in a format best suited to represent the assessment criteria outlined by the Department of Foreign Languages and Literatures. S/U grading.

FLAL 410. SMALL-GROUP STUDY IN FOREIGN LANGUAGES (1). Small groups of participants in the Foreign Language Residence Program refine and strengthen their oral language skills under the guidance of faculty members. Open only to residents of the program. May be repeated to a maximum of 4 semester hours. Hours may not be applied towards the major or minor.

FLAL 483. APPLIED LINGUISTICS AND THE ROMANCE LANGUAGES (3). Survey of the principles of linguistic theory as they apply to the teaching of the major romance languages. Emphasis on taxonomic and transformational linguistics. PRQ: Completion of the second year of a romance language or consent of department.

FLIS 481. INDEPENDENT STUDY IN A FOREIGN LANGUAGE (1 to 6). Independent research on a cultural, linguistic, or literary topic. Detailed outline of proposed research required prior to enrollment. May be repeated to a maximum of 6 semester hours. PRQ: Three 400-level courses in the language and consent of department.

FLIS 482H. HONORS INDEPENDENT STUDY (3). Independent research on a literary, cultural, or linguistic topic under the guidance of a faculty member, for students pursuing the B.A. degree with honors in foreign languages and literatures. Student must present a detailed outline of proposed research to the honors adviser for approval. PRQ: Three 400- level courses in the major language, senior status, and consent of department.

FLMT 401. CLINICAL MIDDLE OR SECONDARY SCHOOL EXPERIENCE IN FOREIGN LANGUAGES(1 to 2). Discipline-based clinical experience for students seeking initial middle-school or secondary certification in French, German, or Spanish. Includes observation, evaluation, methods, and problems practicum as a component of a minimum of 40 clock hours of supervised and formally evaluated experiences in the particular school setting in which student teaching will likely take place. S/U grading. CRQ: FLMT 491.

FLMT 490. TEACHING METHODOLOGIES FOR THE ELEMENTARY SCHOOL FOREIGN LANGUAGE CLASSROOM (3). Development of an effective foreign language program at the elementary school level with emphasis on development of materials and techniques for such programs. PRQ: Completion of the 301-302 level in any foreign language; instructor permission. Enrollment in a teacher preparation program strongly recommended.

FLMT 491. METHODS OF FOREIGN LANGUAGE TEACHING IN THE MIDDLE AND HIGH SCHOOLS (3). Theoretical bases of the teaching of modern foreign languages at the middle and high school level, including an introduction to the most prominent theories of second language acquisition. Introduction to instructional materials and classroom methods and techniques employed in language teaching at these levels. Attention to cultural diversity of students and the needs of the exceptional student. Extensive practice in classroom application of these methods and techniques. CRQ: ILAS 401. PRQ: Consent of department.

FLPT 485. STUDENT TEACHING (SECONDARY) IN FOREIGN LANGUAGES(12). Student teaching for one semester. Not available for credit in the major. See “Teacher Certification Requirements” for other regulations. PRQ: FLMT 491 and consent of department.

FLST 381. SPECIAL STUDIES IN LANGUAGE I(1 to 9). Special topics in the various foreign languages. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

FLST 382. SPECIAL STUDIES IN LANGUAGE II(1 to 9). Special topics in the various foreign languages. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: Consent of department.

FLST 481. SPECIAL TOPICS IN LITERATURE I (3). Study of a major author, genre, theme, period, or literary movement. Topics announced. May be repeated to a maximum of 9 semester hours as topic changes. PRQ: Consent of department.

FLST 482. SPECIAL TOPICS IN LITERATURE II (3). Study of a major author, genre, theme, period, or literary movement. Topics announced. May be repeated to a maximum of 9 semester hours as topic changes. PRQ: Consent of department.

FLST 483. SPECIAL TOPICS IN LINGUISTICS (3). Topics announced. May be repeated to a maximum of 6 semester hours as topics change. PRQ: Consent of department.

FLTR 271. LITERATURE IN TRANSLATION (3). Survey of a particular foreign literature or the study of a major author, theme, genre, period or literary movement. Topics announced. May be repeated once for credit as the topic changes. Does not satisfy the foreign language requirement for the B.A. and cannot be applied toward major credit by majors in this department.

Foreign Languages and Literatures Faculty

Anne L. Birberick, Ph.D., University of Virginia, associate professor, chair
Carl Atlee, Ph.D., University of Arizona, assistant professor
Katharina Barbe, Ph.D., Rice University, associate professor
John R. Bentley, Ph.D., University of Hawaii, associate professor
Dennis E. Brain, Ph.D., University of Texas, associate professor
Louise Ciallella, Ph.D., University of Wisconsin, assistant professor
Jessamine Cooke-Plagwitz, Ph.D., Queen’s University, Kingston, Ontario, assistant professor
Mary L. Cozad, Ph.D., University of California, Berkeley, assistant professor
William F. Harrison, Ph.D., University of New Mexico, associate professor
John F. Hartmann, Ph.D., University of Michigan, professor
Patricia B. Henry, Ph.D., University of Michigan, associate professor
Frances Jaeger, Ph.D., University of Illinois, assistant professor
Joanna Kot, Ph.D., University of Chicago, associate professor
Susan H. Linden, Ph.D., State University of New York, Buffalo, associate professor
Maryline Lukacher, Ph.D., University of California, San Diego, associate professor
Michael L. Mazzola, Ph.D., Cornell University, professor
Eloy E. Merino, Ph.D., University of Miami, associate professor
Michael C. Morris, Ph.D., University of Iowa, associate professor
Christopher Nissen, Ph.D., University of California, Berkeley, associate professor
F. Corey Roberts, Ph.D., Indiana University, assistant professor
Joshua P. Rodriguez, Ph.D., Ohio State University, assistant professor
Francisco Solares-Larrave, Ph.D., University of Illinois, assistant professor
U. Saw Tun, M.A., Rangoon University, associate professor
Pablo Virumbrales, Ph.D., Ohio State University, assistant professor
Philippe Willems, Ph.D., University of Colorado, Boulder, assistant professor

Department of Geography (GEOG, MET)

The Department of Geography offers the B.A. and B.S. degrees with a major in geography and the B.S. degree in meteorology. The B.S. degree in geography offers the opportunity to develop greater understanding of a specific aspect of geography by choosing an area of study in area studies, geographic information systems (GIS), natural environmental systems, or urban/economic systems. By the proper selection of electives, the student can meet federal civil service qualification standards as a soil scientist or hydrologist. An advanced studies certificate is also available in GIS.

The major in meteorology provides training for students interested in general meteorology, weather forecasting, and environmental meteorology, and the education necessary for graduate work in the atmospheric sciences. The program offers the student the opportunity to participate in the NIU Weather Service. Students should consult with a departmental adviser to plan a program of study in either geography or meteorology.

The department offers a minor in geography and a departmental honors program and participates in the interdisciplinary minors in black studies, environmental management systems, environmental studies, international studies, Latino/Latin American studies, Southeast Asian studies, and urban studies.

Major in Geography (B.A. or B.S.)

Requirements in Department (36)

GEOG 101 - Survey of Physical Geography (3)
GEOG 102 - Survey of Physical Geography Laboratory (1)
GEOG 105 - Introduction to the Atmosphere (3)
GEOG 106 - Introduction to the Atmosphere Laboratory (1)
GEOG 202 - World Regional Geography (3)
GEOG 204 - Geography of Economic Activities (3)
GEOG 256 - Maps and Mapping (3)
GEOG 300 - Proseminar (1)
GEOG 359 - Introduction to Geographic Information Systems (3)
GEOG 361 - Geographic Measurement and Quantitative Analysis (3)
Electives chosen from one of the following four course groupings or any combination.[1]

Area Studies

Course work from the following
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 330 - Geography of the U.S. and Canada (3)
- GEOG 332 - Geography of Latin America (3)
- GEOG 336 - Geography of Africa (3)
- GEOG 338 - Geography of Asia (3)
- GEOG 430 - Population Geography (3)
- GEOG 435X - Space in Language and Culture (3)
- GEOG 451 - Political Geography (3)
- GEOG 461 - Applied Statistics in Geographic Research (3)
- GEOG 490 - Community Geography (3)
- GEOG 491 - Undergraduate Research in Geography (3)

Geographic Information Systems

Course work from the following
- GEOG 455 - Land-Use Planning (3)
- GEOG 459 - Geographic Information Systems (3)
- GEOG 460 - Remote Sensing of the Environment (3)
- GEOG 465 - Geographic Field Work (3-8)
- GEOG 467 - Workshop in Cartography/GIS (1-3)
- GEOG 490 - Community Geography (3)
- GEOG 493 - Computer Methods and Modeling (1-3)
- GEOG 498M - Seminar: Methodology and Techniques (3)

Natural Environmental Systems[2]

Course work from the following
- GEOG 302 - Soil Science (4)
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 322 - Geography of World Plant Communities (3)
- GEOG 370 - Regional Climatology (3)
- GEOG 402 - Pedology (4)
- GEOG 403 - Soil Geography and Land Use Planning (3)
- GEOG 413 - Forest Ecology and Management (3)
- GEOG 422 - Plant-Soil Interactions (4)
- GEOG 442X - Geomorphology (3)
- GEOG 453 - Environmental Management (3)
- GEOG 455 - Land-Use Planning (3)
- GEOG 461 - Applied Statistics in Geographic Research (3)
- GEOG 465 - Geographic Field Work (3)
- GEOG 490 - Community Geography (3)
- GEOG 492 - Hydrology (3)

Urban/Economic Systems

Course work from the following
- GEOG 304 - Transportation Geography (3)
- GEOG 362 - Geography of Urban Systems (3)
- GEOG 403 - Soil Geography and Land Use Planning (3)
- GEOG 430 - Population Geography (3)
- GEOG 453 - Environmental Management (3)
- GEOG 455 - Land-Use Planning (3)
- GEOG 461 - Applied Statistics in Geographic Research (3)
- GEOG 463 - Urban Geography (3)
- GEOG 464 - Location Analysis (3)
- GEOG 490 - Community Geography (3)
- GEOG 491 - Undergraduate Research in Geography (1 to 3)
- GEOG 498D - Seminar in Current Problems: Urban/Economic Geography (3)

Requirements outside Department (B.A., 7-20; B.S., 10-15)

For the B.A. degree

*MATH 210 - Finite Mathematics (3),
OR *MATH 211 - Calculus for Business and Social Science (3),
OR *MATH 229 - Calculus I (4)
STAT 301 - Elementary Statistics (4)
Fulfillment of foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree.")

For the B.S. degree

See "College Requirements for the B.S. Degree." Students should consult the undergraduate adviser for the appropriate sequence for their course of study.

Total Hours for a Major in Geography: 43-56 (B.A.) OR 46-51 (B.S.)

Recommendations

Students interested in environmental studies are strongly advised to complete at least two, one-year sequences of courses in a laboratory science. Students should contact the undergraduate adviser for career goal advisement early in their course of study and regularly consult the Curriculum and Course Guide to Geography and Meteorology available in the department office.

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* Available for general education credit.
[1] GEOG 491 may be included in these 12 hours for no more than 3 semester hours of credit.
[2] Students will be better prepared for this area by fulfilling the B.S. degree requirements.

Major in Meteorology (B.S.)

Requirements in Department (35)

GEOG 105 - Introduction to the Atmosphere (3)
GEOG 106 - Introduction to the Atmosphere Laboratory (1)
GEOG 300 - Proseminar (1)
GEOG 460 - Remote Sensing of the Environment (3)
MET 300 - Meteorology (4)
MET 320 - Synoptic Meteorology (3)
MET 410 - Weather Dynamics I (4)
MET 411 - Weather Dynamics II (4)
MET 421 - Advanced Synoptic Meteorology (3)
Course work from the following (9)
- GEOG 370 - Regional Climatology (3)
- GEOG 391B - Internship: Meteorology/Climatology (1-3)
- GEOG 461 - Applied Statistics in Geographic Research (3)
- GEOG 491 - Undergraduate Research in Geography (3)
- GEOG 492 - Hydrology (3)
- GEOG 498B - Seminar in Current Problems: Meteorology/ Climatology (1-3)
- MET 430 - Micrometeorology (3)
- MET 431 - Applications in Climatology (3)
- MET 444 - Mesoscale Meteorology (3)
- MET 485 - Atmospheric Physics (3)
- MET 491 - Undergraduate Research in Meteorology (1-3)

Requirements outside Department (31)

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)
*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 336 - Ordinary Differential Equations (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)
*PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
STAT 301 - Elementary Statistics (4)

Total Hours for a Major in Meteorology (B.S.): 66

Recommendations

Students are advised to contact an adviser early in their course of study. A suggested plan of study is available in the department office.

Teacher Certification

Students who want to be certified to teach geography/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in geography.

Admission

Students are admitted to the certification program when they have

- established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;
- attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;
- completed at least 6 semester hours of geography at NIU and earned a minimum GPA of 3.00 in all geography courses taken at the college/university level;
- completed the core competency requirements in English and oral communication;
- completed at least 20 clock hours of approved early clinical experiences; and
- obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in geography. In addition, they must complete GEOG 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, GEOG 496X must be taken in the semester immediately prior to enrollment in student teaching.

Other Requirements

Students must complete HIST 400, Student Teaching in History/Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the Department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

The B.S. degree with Honors in Geography or Meteorology will be awarded to students satisfying the following requirements.

- Approval of the department chair for admission to the honors degree program.
- Senior standing with a minimum GPA of 3.00 in all course work and of 3.50 in geography courses.
- Completion of the requirements of the declared departmental major.
- Completion of a senior honors thesis under GEOG 491H or MET 491H for 2-4 semester hours. The honors thesis must be approved by the project faculty adviser and a faculty member appointed by the department chair.

Minor in Geography (20)

Meteorology majors may declare the minor in geography.

*GEOG 101 - Survey of Physical Geography (3)
*GEOG 102 - Survey of Physical Geography Laboratory (1)
*GEOG 105 - Introduction to the Atmosphere (3)
*GEOG 106 - Introduction to the Atmosphere Laboratory (1)
*GEOG 202 - World Regional Geography (3)
*GEOG 204 - Geography of Economic Activities (3)
Electives from geography courses at the 300 or 400 level (6)

Six or more semester hours in the minor must be taken at NIU.

* Available for general education credit.

Certificate of Undergraduate Study

Geographic Information Systems (15)

This certificate is designed to provide pre-professional study in the collection, management, analysis, and display (mapping) of spatial data. It is open to all NIU undergraduates. Students must maintain good academic standing in the university, achieve a minimum grade of C in each certificate course, achieve a GPA of at least 3.00 in all certificate courses, and complete all certificate course work within six calendar years. All course requirements for the certificate must be completed at NIU. With department approval, some or all of the certificate courses may be applied toward undergraduate degree requirements in the department. The Department of Geography reserves the right to limit enrollment in any of the certificate courses.

Requirements

GEOG 256 - Maps and Mapping (3)
GEOG 359 - Introduction to Geographic Information Systems (3)
GEOG 459 - Geographic Information Systems (3)
Course work from the following with consent of adviser (6)
- GEOG 391E - Internship: Geographic Information Systems (3)
- GEOG 455 - Land-Use Planning (3)
- GEOG 460 - Remote Sensing of the Environment (3)
- GEOG 464 - Location Analysis (3),
  - OR OMIS 379 - Business Applications of Geographic Information Systems (3)
- GEOG 467 - Workshop in Cartography/GIS (3-6)
- GEOG 491 - Undergraduate Research in Geography (1-3)
- GEOG 493 - Computer Methods and Modeling (1-3)
- GEOG 498 - Seminar in Current Problems: Methodology and Techniques (3)

Course List

Geography (GEOG)

101. SURVEY OF PHYSICAL GEOGRAPHY (3). Elements of the physical environment, with emphasis on hydrology, vegetation, landforms, and soils; processes involved in their interactions, their spatial variations, and interrelationships between these elements and humankind. Three hours of lecture. Not available for credit to students with credit in GEOG 101A.

102. SURVEY OF PHYSICAL GEOGRAPHY LABORATORY (1). Selected laboratory experiments to accompany GEOG 101. Two hours of laboratory. CRQ: GEOG 101.

105. INTRODUCTION TO THE ATMOSPHERE (3). Introduction to elements of weather and climate with emphasis on the interrelationships between heat, pressure, and moisture including the global radiation balance. Introduction to climate classification, and atmospheric processes that control global climates and climatic change. Three hours of lecture. Not available for credit to students with credit in GEOG 105A.

106. INTRODUCTION TO THE ATMOSPHERE LABORATORY (1). Selected laboratory experiments to accompany GEOG 105. Two hours of laboratory. CRQ: GEOG 105.

202. WORLD REGIONAL GEOGRAPHY (3). Geographic analysis of the nations and regions of the world, emphasizing their economic, political, and social organization. Attention given to contemporary problems.

204. GEOGRAPHY OF ECONOMIC ACTIVITIES (3). A global system approach to understanding the economic interdependence among people, regions, and nations.

253. ENVIRONMENT AND SOCIETY (3). Introduction to the study of human-environment interactions from a geographic perspective, with emphasis on the role of humans in changing the face of the earth. Fundamentals of environmental science as well as global and local issues related to human population growth, agriculture, water resources, biodiversity, forest resources, energy use, climate change, and environmental health.

256. MAPS AND MAPPING (3). Introduction to maps as models of our earth, tools of visualization, and forms of graphic communication. Use of satellite and aerial imagery, land surveying, and geographic information systems in map production. Thematic maps and how they are used. Map design for informational and persuasive purposes. Two hours of lecture, two hours of laboratory.

300. PROSEMINAR (1). Professional development for students in geography and meteorology. Educational opportunities and career options. Library and literature research skills. S/U grading. PRQ: Declared major in geography or meteorology.

302. SOIL SCIENCE(4). Lecture, field and laboratory study of physical, chemical, and biological properties of soils with emphasis on soil development, classification, geography, management, and conservation. Lecture, laboratory, and field experience. PRQ: GEOG 101 and GEOG 102, or consent of department.

303. WATER RESOURCES AND THE ENVIRONMENT (3). Evaluation of water as a resource; its availability, distribution, use, and quality. Operation of the hydrologic cycle and relationships between surface water and the soil, groundwater, and atmosphere. Human impacts on water resources and the management of water-related hazards, including flooding, drought, and the spread of disease. Lecture and field experience.

304. TRANSPORTATION GEOGRAPHY (3). Concepts and analysis of distribution and movement systems as they relate to spatial patterns of production and the consumption of goods and services. PRQ: ECON 260 or GEOG 204, or consent of department.

322. GEOGRAPHY OF WORLD PLANT COMMUNITIES (3). Spatial and temporal variations of vegetation communities, detailed examination of world biomes, and emphasis on interrelationships among vegetation, climate, and soil. Long-term changes in biome extent and dominance from the Cretaceous to present. Recent vegetation change and models of succession and vegetation dynamics plus human impacts on plant communities.

324X. WOMEN IN SCIENCE (3). *Crosslisted as WOMS 324 and BIOS 324X.* Why women are underrepresented in many scientific fields. The history of women in science, the current status of women in science, and the representation of women in various scientific disciplines.

330. GEOGRAPHY OF THE U.S. AND CANADA (3). Regional analysis of the two countries. Cultural, economic, and political patterns. Geographic perspectives applied to current issues and problems. PRQ: 3 semester hours in geography or consent of department.

332. GEOGRAPHY OF LATIN AMERICA (3). Selected topics in Latin America's social, economic, and political geography. Emphasizes problems of regional development. PRQ: 3 semester hours in geography or consent of department.

336. GEOGRAPHY OF AFRICA (3). Spatial analysis of the human and physical patterns of Africa. PRQ: 3 semester hours in geography or consent of department.

338. GEOGRAPHY OF ASIA (3). Regional analysis of Asia. Natural environment and resources, natural hazards, history and cultures, agriculture and rural development, demographic changes, urbanization and urban problems, industry and trade, tourism, areas of political conflicts. Geographic perspectives applied to contemporary issues. PRQ: 3 semester hours in geography or consent of department.

359. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (3). Study of the fundamental principles of Geographic Information Systems (GIS). Emphasis on the development of these systems, their components and their integration into mainstream geography. Two hours of lecture, two hours of laboratory. PRQ: GEOG 256 or consent of department.

361. GEOGRAPHIC MEASUREMENT AND QUANTITATIVE ANALYSIS (3). Description of measurement systems used in geography and ways in which numerical data are presented. Fundamentals of probability and statistical inference applied to geographic problems. Introduction to computer applications in the presentation and analysis of geographic data. Two hours of lecture, two hours of laboratory. PRQ: STAT 301.

362. GEOGRAPHY OF URBAN SYSTEMS (3). Past and current patterns of worldwide urbanization, urban hierarchies and systems of cities, functional metropolitan and megalopolitan regions, the city's role in economic and social development.

370. REGIONAL CLIMATOLOGY (3). Principles of climatic classification; types and groups derived from a synthesis of the climatic elements; major anomalies. PRQ: GEOG 105 and GEOG 106, or MET 300 and STAT 301.

390. TOPICS IN GEOGRAPHY (1 to 3). Current or special interest topics in the subfields of geography. May be repeated to a maximum of 9 semester hours as subject varies. PRQ: Consent of department.

391. INTERNSHIP (1 to 6).
A. Natural Environmental Systems
B. Meteorology/Climatology
C. Urban/Economic Geography
D. Area Studies
E. Geographic Information Systems
J. Remote Sensing
Work as an intern in an off-campus agency or firm. Students complete intern tasks as assigned, do readings and prepare a paper under the supervision of a faculty member. May be repeated to a maximum of 6 semester hours, but only 3 semester hours will apply to the degree program. S/U grading. PRQ: Consent of department.

402. PEDOLOGY (4). Soil genesis, distribution, and classification. Environment, geomorphology, and soil formation relationships. Soil description, mapping, and interpretation for land use. Lecture, laboratory, and field experience. PRQ: GEOG 302 or consent of department.

403. SOIL GEOGRAPHY AND LAND USE PLANNING (3). Regional and local problems of soil utilization and management. Strategies for using soil data in land use plans and legislation. PRQ: GEOG 101 and GEOG 102, or consent of department.

413. FOREST ECOLOGY AND MANAGEMENT (3). Forest species regeneration, growth and mortality. Past and present environmental conditions, disturbances, and forest processes. Tree identification, forest measures, and field methods. Lecture, laboratory, and field experience. PRQ: GEOG 322 or BIOS 103 or BIOS 104, or consent of department.

422. PLANT-SOIL INTERACTIONS (4). *Crosslisted as BIOS 422X.* Chemical and physical properties of soils affecting vegetation, segregation of natural plant communities, and managed systems. Lecture, laboratory, and field experience. PRQ: BIOS 103 or BIOS 104, and GEOG 302, or consent of department.

430. POPULATION GEOGRAPHY (3). Geographic perspective on overpopulation, immigration, environmental degradation, development, and human rights. Fundamentals of fertility, mortality, migration, and composition. Discussion of both conceptual and empirical approaches focusing on national and international population and public policy issues. PRQ: 3 semester hours in geography or sociology, or consent of department.

435X. SPACE IN LANGUAGE AND CULTURE (3). *Crosslisted as ANTH 435.* Exploration of how various languages express spatial relationships by using different parts of speech, how culture shapes ways of organizing and using space in daily and ritual behavior, and the mental organization of spatial knowledge, with emphasis on universal patterns that generate cultural and individual realizations.

442X. GEOMORPHOLOGY (3). *Crosslisted as GEOL 442.* Systematic study of geologic processes affecting the evolution of the earth's surface. Emphasis on glacial, fluvial, and coastal processes and their relationship to the development of landforms under diverse climates of the past and present. Lecture, laboratory, and field trips. PRQ: GEOG 101 and GEOG 102, or GEOL 105, or GEOL 120, or GEOL 120 and GEOL 121.

451. POLITICAL GEOGRAPHY (3). Study of political phenomena in areal context. Emphasis on temporal and spatial attributes of the state. Core areas and capitals, boundaries, administration of territory. Geopolitics, power, multinational organizations, and modern theories about states. Geographic concepts applied to in-depth analysis of selected conflict regions. PRQ: Consent of department.

453. ENVIRONMENTAL MANAGEMENT (3). Human-environment geography perspective on natural resource planning, environmental conservation, and sustainable development throughout the world. Advanced analysis of environmental issues in a variety of geographic contexts and at scales ranging from local to global. Emphasis on critical and analytical thinking skills. PRQ: GEOG 253 or consent of department.

455. LAND-USE PLANNING (3). Study of processes and policies in landuse and land development decisions. Mapping and GIS decision-making techniques applied to the analysis of land-use patterns and management conflicts at national, state, regional, and local government scales. Lecture, laboratory, and field experience.

459. GEOGRAPHIC INFORMATION SYSTEMS (3). Study of the conceptual framework and development of geographic information systems. Emphasis on the actual application of a GIS to spatial analysis. Two hours of lecture and two hours of laboratory. PRQ: GEOG 359 or consent of department.

460. REMOTE SENSING OF THE ENVIRONMENT (3). Introduction to the principles of acquiring and interpreting data from remote sensing systems. Extraction of the earth resource information through image processing techniques and applications of satellite remote sensing in earth and atmospheric sciences. Use of remote sensing for mapping, measuring, and detecting atmospheric motion and weather systems, and assessing environmental change. Lecture, laboratory, and field experience. PRQ: MATH 210 or MATH 229 and STAT 301.

461. APPLIED STATISTICS IN GEOGRAPHIC RESEARCH (3). Application of descriptive and inferential statistics in geographic research: the general linear model, spatial statistics, computer analysis, and research design and presentation. PRQ: STAT 301.

463. URBAN GEOGRAPHY (3). Examination of the internal patterns and dynamics of urban areas. Spatial, economic, political, social, and behavioral approaches to the study of cities. Major focus is on U.S. cities. PRQ: GEOG 362 or consent of department.

464. LOCATION ANALYSIS (3). Examination of the location patterns of human social and economic activities. Principles of optimal location for agricultural, industrial, retail, transportation, and urban functions. Use of GIS and other spatial methods in location analysis. Lecture and laboratory. PRQ: GEOG 204 or ECON 260 and GEOG 361, or consent of department.

465. GEOGRAPHIC FIELD WORK (3 to 8). Field problems of urban-economic, cultural, and physical geography. Lecture, laboratory, and field experience. PRQ: Consent of department.

467. WORKSHOP IN CARTOGRAPHY/GIS (1 to 3). Problems and techniques of map or GIS prototype development. Projects vary but include the processes of design and production, editing and quality control, and final implementation as printed or operational product. Directed individual study. May be repeated to a maximum of 6 semester hours. PRQ: GEOG 256 and consent of department.

469. EDUCATION METHODS AND MATERIALS IN GEOGRAPHY (3). Strategies of presenting geographic concepts. Evaluation of techniques and materials. PRQ: EPS 405, EPS 406, and senior standing.

490. COMMUNITY GEOGRAPHY (3). Team research project focusing on an issue of practical concern to the northern Illinois community. Application of geography and/or meteorology tools and methods to contemporary issues. Variable topics. May be repeated to a maximum of 6 semester hours. PRQ: GEOG 359, STAT 301, and at least 15 semester hours in geography or meteorology.

491. UNDERGRADUATE RESEARCH IN GEOGRAPHY (1 to 3). May be repeated to a maximum of 6 semester hours. PRQ: Senior standing and consent of department.

492. HYDROLOGY (3). *Crosslisted as GEOL 492X*. Quantitative examination of the properties, occurrence, distribution, and circulation of water near the earth's surface and its relation to the environment. Emphasis on applying fundamental physical principles to understand surface and subsurface hydrological processes. Lecture, laboratory, and field trip. PRQ: GEOG 101 and GEOG 102, or GEOL 120; and MATH 210 or MATH 229; and PHYS 150 or PHYS 210; or consent of department.

493. COMPUTER METHODS AND MODELING (1 to 3). Programming topics in geographic or meteorological research problems, computer graphics, simulation techniques, regional modeling, geographic information systems applications, and climate modeling. Lecture and laboratory. May be repeated to a maximum of 6 semester hours as topic varies. PRQ: Consent of department.

495X. TEACHING OF PHYSICAL SCIENCES (3). *Crosslisted as PHYS 495.* Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula; classroom and laboratory organization; microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; methods of evaluation. PRQ: Consent of department. CRQ: ILAS 401.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

497. STUDENT TEACHING (SECONDARY) IN GEOGRAPHY/ EARTH SCIENCES (7 to 12). Student teaching for 10 weeks or for one semester. Assignments to be made after approval by the Department of Geography. Not available for credit in the major. See "Teacher Certification Requirements." PRQ: GEOG 496X and consent of department.

498. SEMINAR IN CURRENT PROBLEMS (1 to 3).
A. Natural Environmental Systems
B. Meteorology/Climatology
C. Environmental Management
D. Urban/Economic Geography
E. Area Studies
J. Hydrology
K. Soil Science
M. Methodology and Techniques
Selected topics in the various subfields of geography. May be repeated to a maximum of 6 semester hours as the topic changes. PRQ: Consent of department.

Meteorology (MET)

300. METEOROLOGY (4). Study of the physical and dynamic processes involved in atmospheric science. Radiation and energy budgets, thermodynamics, stability, water vapor and clouds, pressure, winds, and circulation theorems. Three hours of lecture and two hours of laboratory. PRQ: GEOG 105, GEOG 106, and MATH 229.

320. SYNOPTIC METEOROLOGY (3). Introduction to meteorological codes, analysis, forecasting techniques, and the theory of synoptic-scale weather systems. Basic principles of atmospheric thermodynamics, kinematics, and numerical weather prediction. Two hours of lecture and two hours of laboratory. PRQ: MET 300.

410. WEATHER DYNAMICS I (4). Statics, conservation of mass, linear momentum and energy, shallow water equations, scale analysis, geostrophic, gradient, and thermal winds, circulation and vorticity theorems, and introduction to the planetary boundary layer. Three hours of lecture and two hours of laboratory. PRQ: MET 300, MATH 232, and MATH 336. CRQ: CSCI 230 or CSCI 240.

411. WEATHER DYNAMICS II (4). Waves in the atmosphere, quasi-geostrophic flow theory, introduction to numerical weather prediction and dynamic instability theory. Three hours of lecture and two hours of laboratory. PRQ: MET 410.

421. ADVANCED SYNOPTIC METEOROLOGY (3). Applications of synoptic analysis, forecast techniques, and fluid dynamics to the diagnosis and forecasting of mid-latitude weather systems. Examination of the lifecycle of mid-latitude cyclones using quasi-geostrophic theory. Two hours of lecture and two hours of laboratory. PRQ: MET 320.

430. MICROMETEOROLOGY (3). Study of physical processes in the turbulent transfer of momentum, heat, and moisture in the atmospheric boundary layer. Field installation and operational use of meteorological instrumentation. Assessment of precision, accuracy, and calibration of sensors. Data processing and interpretation. Lecture and field experience. PRQ: MET 300 and CSCI 230 or CSCI 240.

431. APPLICATIONS IN CLIMATOLOGY (3). Application of climatological theory and personal computers to develop climate relationship-decision models for use in agriculture, water resources, utilities, construction, transportation, and recreation. Lecture and field experience. PRQ: GEOG 370.

444. MESOSCALE METEOROLOGY (3). Structure, evolution, forcing, and prediction of weather phenomena with short temporal and spatial scales. Observing systems and numerical weather predictions applied to mesoscale phenomena such as severe thunderstorms, tornadoes, and heavy snow. Two hours of lecture and two hours of laboratory. PRQ: MET 320.

485. ATMOSPHERIC PHYSICS (3). Fundamentals of radiation transfer theory, cloud and precipitation physics, satellite remote sensing techniques, and physics of the middle and upper atmosphere. Lecture and laboratory. PRQ: MATH 336 and MET 300, or consent of department.

491. UNDERGRADUATE RESEARCH IN METEOROLOGY (1 to 3). May be repeated to a maximum of 6 semester hours. PRQ: Senior standing and consent of department.

Geography Faculty

Andrew J. Krmenec, Ph.D., Indiana University, professor, chair
Walter S. Ashley, Ph.D., University of Georgia, assistant professor
Mace L. Bentley, Ph.D., University of Georgia, assistant professor
Sarah A. Blue, Ph.D., University of California, assistant professor
David Changnon, Ph.D., Colorado State University, associate professor
Richard Greene, Ph.D., University of Minnesota, associate professor
Michael E. Konen, Ph.D., Iowa State University, associate professor
Wei Luo, Ph.D., Washington University, associate professor
Lesley S. Rigg, Ph.D., University of Melbourne, associate professor
Jie Song, Ph.D., University of Delaware, associate professor
Fahui Wang, Ph.D., Ohio State University, associate professor

Department of Geology and Environmental Geosciences (GEOL)

The Department of Geology and Environmental Geosciences offers a B.S. degree with emphases in geology, environmental geosciences, and earth science teaching. The environmental geosciences emphasis includes cross-disciplinary study with other departments. The emphases are designed to prepare students for a variety of careers in environmental geology, geology and hydrogeology, secondary teaching, and other professions that utilize geoscience information. The program also prepares students for graduate study in geology, geochemistry, geophysics, oceanography, hydrogeology, and other environmental fields. The program is flexible to accommodate the needs of students with a variety of interests. For this reason, the student must consult with a departmental adviser at the earliest possible opportunity to plan a program of courses that will fulfill her or his objectives.

The department's 100-level courses can be used by non-majors toward fulfilling the science area requirement of the university's general education program. A minor is offered in geology and environmental geosciences which should be of interest to majors in geography, biology, physics, and chemistry. The department also participates in the interdisciplinary minor in environmental studies. A departmental honors program is available for outstanding students.

Major in Geology and Environmental Geosciences (B.S.)

Students planning careers as professional geologists normally complete the emphasis in geology. The emphasis in environmental geosciences is designed for students seeking a broad scientific base for pursuit of careers in professions that may utilize environmental knowledge, such as land-use planning, law, political science or economics and therefore includes several courses in or related to a cross-disciplinary department of the student's choice. These courses may provide the basis for the completion of a minor in that department. Students planning to pursue initial teacher certification to teach in grades 6-12 will usually select the emphasis in earth science education, but completion of the emphasis does not fulfill all the requirements for initial teacher certification.

Emphasis 1. Geology

Requirements in Department (43-44)

GEOL 320 - Environments and Life Through Time (4)
GEOL 325 - Solid Earth Composition (4)
GEOL 330 - Global Cycles (4)
GEOL 335 - Dynamics and Structure of the Earth (4)
GEOL 405 - Stratigraphy (3)
GEOL 478 - Geologic Field Work (3) (or an approved substitute taken at another university)
GEOL 479 - Geologic Field Work (3) (or an approved substitute taken at another university)
One of the following (3-4)
- GEOL 103 - Planetary and Space Science (3)
- GEOL 104 - Introduction to Ocean Science (3)
- GEOL 105 - Environmental Geology (3)
- GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
- GEOL 203 - Global Change (3)

Upper-division GEOL course work, which may include senior thesis, selected in consultation with undergraduate adviser (15)

Requirements outside Department (22-24)[1]

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
*MATH 229 - Calculus I (4), and MATH 230 - Calculus II (4),
OR *MATH 210 - Finite Mathematics (3), and *MATH 211 - Calculus for Business and Social Science (3)
*PHYS 210 and *PHYS 211 - General Physics I and II (8),
OR *PHYS 253 and *PHYS 273 - Fundamentals of Physics I and II (8)[2]

Total Hours for Emphasis 1, Geology: 65-68

Emphasis 2. Environmental Geosciences

Requirements in Department (32-36)

GEOL 320 - Environments and Life Through Time (4)
GEOL 325 - Solid Earth Composition (4)
GEOL 330 - Global Cycles (4)
GEOL 335 - Dynamics and Structure of the Earth (4)
GEOL 477 - Field Methods in Environmental Geosciences (4)
One of the following (3-4)
- GEOL 103 - Planetary and Space Science (3)
- GEOL 104 - Introduction to Ocean Science (3)
- GEOL 105 - Environmental Geology (3)
- GEOL 120 - Introductory Geology (3)
- GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
- GEOL 203 - Global Change (3)

Upper-division GEOL course work (9-12) of which a minimum of 9 semester hours shall be in courses other than GEOL 489, GEOL 498,or GEOL 499H (except by approval of the undergraduate advisor).

Requirements outside Department (29-35)

*CHEM 210T - General Chemistry I (3), and*CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
*MATH 229 - Calculus I (4),
OR *MATH 210 - Finite Mathematics (3), and *MATH 211 - Calculus for Business and Social Science (3),
OR *MATH 211 - Calculus for Business and Social Science (3), and STAT 301 - Elementary Statistics (4)

Upper-division course work[3] selected with approval of undergraduate adviser, from the Departments of Biological Sciences, Chemistry and Biochemistry, Economics, Geography, Physics, and/or Political Science. (9)

Additional Requirement: The 9-12 hours of upper-division GEOL course work and 9-12 hours of upper division approved course work from the co-disciplinary departmens must together total a minimum of 20 hours.

Total Hours for Emphasis 2, Environmental Geosciences: 63-67

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* Available for general education credit.
[1] Students who want to pursue graduate study in geochemistry, geophysics, or hydrogeology should take MATH 229, MATH 230, PHYS 253, PHYS 273, as well as MATH 336.
[2] With written approval of the departmental undergraduate adviser, students with a special interest in ecology and/or paleontology may substitute BIOS 205T and BIOS 208T for PHYS 210 and PHYS 211 (or PHYS 253 and PHYS 273).

Emphasis 3. Earth Science Education

Requirements in Department (39-40)

GEOL 201 - The Professional Secondary Science Teacher (1)
GEOL 301 - The Interdisciplinary Secondary Science Teacher (1)
GEOL 320 - Environments and Life Through Time (4)
GEOL 325 - Solid Earth Composition (4)
GEOL 330 - Global Cycles (4)
GEOL 335 - Dynamics and Structure of the Earth (4)
GEOL 401 - The Secondary Earth Science Teacher (1)
GEOL 475 - Science Across Time and Culture (2)
GEOL 483 - Interdisciplinary Teaching of Science in Secondary Education (3)
One of the following areas of study (15-16)

Earth and Space Science

GEOL 103 - Planetary and Space Science (3),
OR *PHYS 162 - Elementary Astronomy (3)
GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
GEOL 429 - Inquiry-Based Field Experiences for Earth Science Teachers (3)
One of the Following
GEOL 344X - Astronomy (3)
GEOL 419 - Elements of Geochemistry and Cosmochemistry (3)
GEOL 420 - Geochemistry of the Earth's Surface (3)
GEOL 427 - Planetary Geoscience (3)
GEOL 458X - Vertebrate Paleontology (3)
GEOL 460 - Plate Tectonics (3)
GEOL 470 - Invertebrate Paleontology (3)
GEOL 496 - Geophysics (3)
Upper-division course work in geology and environmental geosciences or, with approval of the certification coordinator, from other areas of earth science, usually physical geography, meteorology, or astronomy (3)

Environmental Science

GEOL 105 - Environmental Geology (3)
BIOS 106 - Environmental Biology (3)
GEOL 390 - Introduction to Groundwater (3), and GEOL 477 - Field Methods in Environmental Geosciences (4),
OR GEOL 429 - Inquiry-Based Field Experiences for Earth Science Teachers (3), and GEOL 421 - Environmental Geochemistry (3)
One of the Following
ECON 386 - Environmental Economics (3)
GEOG 453 - Environmental Management (3)
GEOL 488 - Environmental Change (3)
HIST 377 - American Environmental History (3)
IDSP 441 - Environmental Management Systems (3)
PHIL 335 - Environmental Ethics (3)
POLS 324 - Politics of Energy and the Environment (3)
POLS 325 - Politics of Regulation (3)
SOCI 455 - Environmental Sociology (3)

Requirements outside Department (31-35)

*GEOG 105 - Introduction to the Atmosphere (3)
*CHEM 210T - General Chemistry I (3), and*CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
*PHYS 210 - General Physics I (4), and *PHYS 211 - General Physics II (4),
OR PHYS 253 - Fundamentals of Physics I: Mechanics (4), and *PHYS 273 - Fundamentals of Physics II: Electromagnetism (4),
OR BIOS 208T - Fundamentals of Biology I (3), BIOS 210 - Fundamentals of Biology I Laboratory (1), BIOS 209T - Fundamentals of Biology II (3), and BIOS 211 - Fundamentals of Biology II Laboratory (1)
ILAS 201 - Introductory Clinical Experience (1)
ILAS 301 - Second Clinical Experience (1 to 2)
*MATH 229 - Calculus I (4),
OR *MATH 211 - Calculus for Business and Social Science (3), and Either *MATH 210 - Finite Mathematics (3), or STAT 301 - Elementary Statistics (4)
One course approved for use in the department's teacher preparation programs in each of the following areas (6)
Educating the exceptional child (3)
Educational psychology (3)

Total Hours for Emphasis 3, Earth Science Education: 69-73

Senior Thesis Requirements

Seniors having a cumulative GPA of 2.75 and having completed at least 26 semester hours in geology and environmental geosciences are eligible to undertake a senior thesis. It is the student's responsibility to find a faculty member willing to serve as project adviser. The Department of Geology and Environmental Geosciences cannot guarantee any student an adviser. A course permit number will not be issued until a project adviser approval form has been filed with the undergraduate adviser. A second committee member will be appointed by the departmental undergraduate committee. The thesis shall be a written report prepared in accordance with accepted guidelines for published scientific literature and reflecting a research effort commensurate with the hours of credit to be earned.

Teacher Certification

Students seeking initial certification either in earth and space science or in environmental science to teach in grades 6-12 (Standard High School Certificate) must schedule an interview with the departmental certification coordinator to formulate a specific plan of study.

Students seeking certification usually will also major in geology and environmental geosciences. Because certification requires additional courses beyond the major, consulting the coordinator before registering for the initial term will facilitate expeditious completion of the program.

The program of courses for meeting certification requirements must be approved by the departmental certification coordinator each semester before registering. Students are responsible for timely submission of the several applications and permits required during the program.

Students[5] transferring geology course credits from other institutions will complete additional NIU courses as determined by the departmental certification coordinator.

Admission Requirements[6]

Application in writing to the departmental certification coordinator.

Completion of *COMS 100, *ENGL 103, *ENGL 104, and *MATH 155 with a grade of C or better (higher numbered courses may be substituted, if approved by the coordinator); ILAS 301; 16 semester hours in geology and environmental geosciences courses numbered 300 and above; and a passing score on the ICTS Basic Skills Test.

GPA of 2.50 in all work at NIU.

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* Available for general education credit.
[3] A cross-departmental pre-law sequence is also available. Students desiring to pursue other disciplines may petition the department's Undergraduate Committee.
[4] Completion of this emphasis does not fufill all requirements for initial teacher certification.
[5] Individuals who want to obtain initial certification as postgraduates or while majoring in another area should consult the departmental certification coordinator. Students who want to obtain initial certification while enrolled in a graduate program or as students-at-large should consult the *Graduate Catalog* and the departmental certification coordinator.
[6] Requirements listed in these sections are minimum requirements. Meeting these requirements will not guarantee students admission to the geology and environmental geosciences teacher certification program or courses.

Minimum combined GPA of 2.70 in NIU courses numbered 200 and above in physical and biological sciences and mathematics.

Satisfactory interview with the coordinator in which the student demonstrates attitudes and motivations appropriate to the professional educator.

Retention Requirements[5]

GPA of 2.50 in all work at NIU.

Minimum combined GPA of 2.70 in NIU courses numbered 200 and above in physical and biological sciences and mathematics.

Satisfactory review of progress with the departmental certification coordinator each semester.

Candidates must demonstrate continuing progress in mastering competencies required to meet professional teaching standards.

Appropriate progress each semester towards completion of a portfolio demonstrating competency in the State of Illinois required standards for initial teacher certification.

Passing score on the ICTS Content Area Test prior to student teaching.

Completion Requirements

Earth and Space Science Teacher Certification

All retention requirements listed above.
GEOL 120 - Introductory Geology, and GEOL 121 - Introductory Geology Laboratory
GEOL 320 - Environments and Life Through Time
GEOL 325 - Solid Earth Composition
GEOL 330 - Global Cycles
GEOL 335 - Dynamics and Structure of the Earth
GEOL 429 - Inquiry-Based Field Experiences for Earth Science Teachers
GEOL 482 - Transition to the Professional Earth Science Teacher
GEOL 487 - Student Teaching (Secondary) in Geology/Earth Science
GEOL 495X - Teaching of Physical Sciences
8 semester hours each in college chemistry, physics, and biological sciences
3 semester hours each in space science and meteorological science
6 upper-division semester hours in earth science

Environmental Science Teacher Certification

All retention requirements listed above.
GEOL 105 - Environmental Geology
GEOL 320 - Environments and Life Through Time
GEOL 325 - Solid Earth Composition
GEOL 330 - Global Cycles
GEOL 335 - Dynamics and Structure of the Earth
GEOL 482 - Transition to the Professional Earth Science Teacher
GEOL 487 - Student Teaching (Secondary) in Geology/Earth Science
GEOL 495X - Teaching of Physical Sciences
8 semester hours each in college chemistry, physics, and biological sciences
3 semester hours each in environmental biology and meteorological science
6 upper-division semester hours in environmental science
3 semester hours of field-based science
3 semester hours on the psychology and teaching of the exceptional child
One semester of educational psychology focusing on the middle and high school student

The State of Illinois has established course and standards-based requirements for certification. Approved certification programs must have requirements that meet or exceed the state requirements. A list of the current state minimum requirements is available from the Illinois State Board of Education web page. The department's certification program requirements are designed to prepare candidates both to meet state course requirements and to demonstrate that they meet state teaching standards.

Current requirements include the possession of an appropriate baccalaureate degree from an accredited institution, a minimum of 32 semester hours in the field, pre-student teaching clinical experiences at the 6-12 grade level or proof of teaching experience at the 6-12 level, student teaching or an approved teaching experience, passage of the basic skills and secondary certificate subject matter examinations of the Illinois Certification Testing System, and demonstration that the candidate has met science teaching standards.

Contact the certification coordinator for information on the necessary criteria that experiences must meet to demonstrate fulfillment of certification requirements.

For extra-departmental requirements see "Teacher Certification Requirements" and the departmental certification coordinator.

Degree with Honors

Students who want to work toward a B.S. degree with honors should discuss the matter with the faculty adviser and the chair of the department's Undergraduate Committee as soon as possible. Admission to the honors degree program requires the approval of the department chair and will be considered only for juniors or seniors having a minimum GPA of 3.00 in all work and of 3.40 in geology and environmental geosciences courses.

Honors in geology and environmental geosciences will be awarded to the candidate who maintains a GPA of 3.40 in department courses, fulfills the normal requirements for the major, and completes an honors thesis under GEOL 499. The senior honors thesis must be approved by the project adviser and a staff member appointed by the departmental undergraduate committee.

Minor in Geology and Environmental Geosciences (24)

*CHEM 210T - General Chemistry I (3)
*CHEM 212 - General Chemistry Laboratory I (1)
*GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
GEOL 320 - Environments and Life Through Time (4)
GEOL 325 - Solid Earth Composition (4)
GEOL 330 - Global Cycles (4)
GEOL 335 - Dynamics and Structure of the Earth (4)

Six or more semester hours in the minor must be taken at NIU.

Course List

103. PLANETARY AND SPACE SCIENCE (3). Exploration of the bodies of our solar system, specifically, what recent probes reveal about the origin, evolution, and interaction of planetary interiors, surfaces, and atmospheres, and their implications for our understanding of the Earth, further space exploration, and the search for extraterrestrial life.

104. INTRODUCTION TO OCEAN SCIENCE (3). Use of the basic sciences in an examination of the use and abuse of the ocean environment, including food and mineral resource exploitation, pollution, coastal development and global climate change. Evaluation

* Available for general education credit.
[5] Requirements listed in these sections are minimum requirements. Meeting these requirements will not guarantee students admission to the geology and environmental geosciences teacher certification program or courses.

of likely outcomes from human impacts on the ocean environment in the context of a basic understanding of ocean processes.

105. ENVIRONMENTAL GEOLOGY (3). Exploration of both constraints imposed by geology on human activities and human impacts on natural processes. Includes fundamental geologic processes and associated hazards (for example, earthquakes, volcanic eruptions, flooding, landslides); occurrence and availability of geologic resources (energy, minerals, water); and topics such as pollution, waste disposal, and land-use planning viewed from a geologic perspective.

120. INTRODUCTORY GEOLOGY (3). Exploration of the diverse processes that continually shape our physical environment. Develops an understanding of earth materials, how the earth works, the causes of natural disasters, and the overriding importance of geologic time. Includes minerals, rocks, volcanoes, radioactive dating, earthquakes, plate tectonics, rivers and floods, ground water resources, and glaciers. For a more comprehensive understanding of the subject, concurrent registration in GEOL 121 is strongly recommended.

121. INTRODUCTORY GEOLOGY LABORATORY(1). Laboratory experience with individual exploration of topics and subjects best presented in a hands-on environment. CRQ: GEOL 120.

201. THE PROFESSIONAL SECONDARY SCIENCE TEACHER(1). *Crosslisted as BIOS 201X, CHEM 201X, and PHYS 201X.* Introduction to the role of the professional science teacher. Includes philosophical trends in teaching (and how they affect the science teacher), major factors affecting how science is taught, and an introduction to science content/ teaching standards. CRQ: ILAS 201.

203. GLOBAL CHANGE (3). Study of the evolution of terrestrial planets with regard to geological, biological, and solar system processes which lead to changes in planetary surfaces and atmospheres. Comparisons between the geological histories and climates of Earth, Mars, and Venus. Emphasis on anthropomorphic effects which may lead to future changes in the earth's atmosphere and climate.

301. THE INTERDISCIPLINARY SECONDARY SCIENCE TEACHER(1). *Crosslisted as BIOS 301X, CHEM 301X, and PHYS 301X.* Seminar on the role of a science teacher in an interdisciplinary and/or integrated science class and how a science curriculum is designed based on state and national standards. Focus on skills all science teachers must possess regardless of specific discipline including knowing how to apply the following topics in ways appropriate to the age and development of the students in a classroom: safety procedures, classroom management, designing and conducting demonstrations, experiments, performance assessments, differentiated curriculum, and uses of technology. CRQ: GEOL 483 and ILAS 301.

320. ENVIRONMENTS AND LIFE THROUGH TIME (4). Examination of the geologic record to learn how to reconstruct past environments, study environmental change, and discover the major events in the history of life on earth. Survey of the evolutionary development of modern life, the generation of the earth's current surface, and the development of modern earth environments. Lectures, laboratory, and two one-day field trips. PRQ: A 100-level or higher natural science course.

325. SOLID EARTH COMPOSITION (4). Introduction to the solid earth, particularly its chemistry, mineralogy, and lithologic heterogeneity. Includes the basics of mineralogy, optical mineralogy, and petrology. Lectures, laboratories centered around the use of the petrographic microscope, and a four-day field trip. PRQ: A 100-level or higher earth science course.

330. GLOBAL CYCLES (4). Chemical, physical, and biological interactions among earth's atmosphere/hydrosphere, biosphere, and lithosphere. Origin and evolution of the atmosphere and oceans; biogeochemical cycles of carbon, oxygen, sulfur, and nutrients; humans as geologic and geochemical agents. Cycles put in the context of the global environmental system and examined in time using specific examples from the geologic record. Laboratory analysis of environmental data drawn from geochemistry, geology, and contemporary sources such as earth observing satellites. PRQ: GEOL 320, CHEM 210T, and CHEM 212.

335. DYNAMICS AND STRUCTURE OF THE EARTH (4). Integrative study of how dynamic tectonic processes create and shape the internal structure and surface of the Earth. Movement of tectonic plates and how interactions along plate boundaries create faults, folds, and fractures. Earth's gravity and magnetic fields, the mechanics of rock deformation and how remote sensing techniques are used to explore the Earth's internal structure. Real-world data to introduce laboratory techniques for describing and interpreting geologic structures. PRQ: GEOL 320 and GEOL 325.

344X. ASTRONOMY (3). *Crosslisted as PHYS 344.* Modern views on the structure of the universe. Our solar system, stars, galaxies, and quasars. Astronomy as an interdisciplinary science, emphasizing the underlying physical principles. PRQ: MATH 155 and PHYS 211 or PHYS 273.

390. INTRODUCTION TO GROUNDWATER (3). Introduction to hydrologic, resource, and geochemical aspects of groundwater and its interaction with surface water; environmental and groundwater quality aspects; aquifers and resources of Illinois; quantitative groundwater hydrology at pre-calculus level. PRQ: Any 100-level class in GEOL or GEOG 101, and MATH 110 or higher.

401. THE SECONDARY EARTH SCIENCE TEACHER(1). Seminar directed to designing earth science instruction to meet state and national standards. Attention given to skills geoscience teachers must possess related to the design and use of instructional methods. Includes a minimum of 40 hours of supervised and formally evaluated experiences in the earth science classroom. CRQ: GEOL 495X.

402. SEDIMENTOLOGY (3). Introduction to the study of sediments and sedimentary rocks: texture, structure, composition, and interpretation. Emphasis on depositional processes, sedimentary facies, and analysis of different environments and depositional systems. Procedures for sedimentary analysis. Lectures, two hours of laboratory, and field trips. PRQ: GEOL 320 and GEOL 330, or consent of department.

405. STRATIGRAPHY (3). Introduction to methods of stratigraphic data gathering and analysis. Construction of stratigraphic cross-sections and stratigraphic columns. Analysis of field data and virtual field trips to collect data and synthesize it. Overview of the stratigraphy of North America including development of the major stratigraphic patterns of the continent, models for their development, and sequences related to major natural resources. PRQ: GEOL 320 and GEOL 325.

410. STRUCTURAL AND DETERMINATIVE MINERALOGY (3). Crystal structures and the chemical and physical factors that govern them. Mineralogical techniques including X-ray, thermal, infra-red and microprobe analysis are emphasized in the laboratory. PRQ: CHEM 211T, CHEM 213, and GEOL 325.

411. OPTICAL MINERALOGY (3). Principles of optics, optical properties of minerals, and the relationship between optical properties and crystallography; measurement of optical properties and mineral identification by the immersion method and in thin section. PRQ: GEOL 325.

412. PETROGRAPHY (3). Study of igneous and metamorphic rocks in both hand specimen and thin section. Detailed rock and mineral identification. Lectures, laboratory, and field experience. PRQ: GEOL 325 or consent of department.

419. ELEMENTS OF GEOCHEMISTRY AND COSMOCHEMISTRY (3). Chemical principles applied to the study of mineral equilibria and to solving geologic problems, with emphasis on high-temperature (igneous and metamorphic) processes. Origin and abundances of the elements; aspects of the composition of the solar system and of the earth's interior. PRQ: CHEM 211T, CHEM 213, and GEOL 325, or consent of department.

420. GEOCHEMISTRY OF THE EARTH'S SURFACE (3). Natural chemical processes occurring at and near the earth's surface. Carbonate equilibria, chemical weathering, oxidation-reduction reactions, and mineral stability relations. Introduction to geochemical cycles and the evolution of sedimentary rocks. PRQ: CHEM 211T, CHEM 213, and GEOL 325.

421. ENVIRONMENTAL GEOCHEMISTRY (3). Exploration of topics in pollution geochemistry including hydrologic and geochemical framework; human-influenced distribution and circulation of metals, radioactive materials, and complex organic compounds; and governmental response to current pollution problems. PRQ: Any 100- or 200-level geology course, CHEM 211T and CHEM 213, or consent of department.

425. ENGINEERING GEOLOGY (3). Utilization and characterization of earth materials for geotechnical and environmental engineering. Assessment of soils and rock quality, Atterberg limits, soil and rock mechanics, geotechnical testing, compaction theory, dewatering, slope stability, and seismic hazards. Case histories and problem solving. PRQ: GEOL 325, GEOL 335, MATH 230, and PHYS 210 or PHYS 253, or consent of department.

427. PLANETARY GEOSCIENCE (3). Origin, evolution, surfaces, and interiors of planetary bodies with emphasis on results from recent space probe missions. Includes topics such as planetary surface processes, structure and geodynamics of planetary interiors, geophysical exploration of planets, planetary remote sensing, engineering properties of planetary soils and rocks, water on Mars, and the search for extraterrestrial life. PRQ: Any 100-level GEOL class or consent of department.

429. INQUIRY-BASED FIELD EXPERIENCES FOR EARTH SCIENCE TEACHERS (3). Field and library survey of the salient geological features and landforms of northern Illinois and southern Wisconsin. Open only to certified teachers and students pursuing certification. PRQ: Introductory course in physical and historical geology and consent of department.

442. GEOMORPHOLOGY (3). *Crosslisted as GEOG 442X.* Systematic study of geologic processes affecting the evolution of the earth's surface. Emphasis on glacial, fluvial, and coastal processes and their relationship to the development of landforms under diverse climates of the past and present. Lecture, laboratory, and field trips. PRQ: GEOG 101 and GEOG 102, or GEOL 105, or GEOL 120, or GEOL 120 and GEOL 121.

444. ECONOMIC GEOLOGY (3). Introduction to metallic and nonmetallic resources, including coal, petroleum, and groundwater. Investigation of ore-forming processes, including studies of ore minerals and suites. Economic, geopolitical, and geological factors related to resource development will be considered. Lectures, laboratory, and field trips. PRQ: GEOL 335 or consent of department.

447. QUANTITATIVE TECHNIQUES IN GEOLOGY (3). Survey of methods and practices of quantifying, collecting, analyzing, and summarizing geologic data. PRQ: MATH 155, MATH 210, MATH 229, or consent of department.

458X. VERTEBRATE PALEONTOLOGY (3). *Crosslisted as BIOS 458.* Survey of the history of vertebrates, focusing on key evolutionary innovations such as the evolution of bone, the invasion of land, and the origin of endothermy. Examination of fossils and the interpretation of them in the context of their geological settings.

460. PLATETECTONICS (3). History, fundamentals, and consequences of plate tectonic theory. Early ideas, including continental drift and seafloor spreading. Using magnetics and seismicity to determine plate motions. Performing plate rotations. Study of driving forces, and interactions at plate boundaries. Competing ideas, such as the expanding Earth theory. PRQ: GEOL 335 or consent of department.

468. GEOMICROBIOLOGY (3). *Crosslisted as BIOS 468X.* Role of microorganisms in diverse environments at and below the surface of the earth. Topics include life in extreme environments, biodegradation and remediation, biogeochemical cycling, and astrobiology, examined from the perspectives of geochemistry, microbial ecology, molecular biology, and ecosystem studies. PRQ: GEOL 120 or BIOS 205T, or consent of department.

470. INVERTEBRATE PALEONTOLOGY (3). *Crosslisted as BIOS 469X.* Principal invertebrate fossil forms of the geologic record, treated from the standpoint of their evolution, and the identification of fossil specimens. Two lectures and two hours of laboratory. Several field trips required. PRQ: Major in biological sciences or geology and environmental geosciences.

471. INTRODUCTION TO MICROPALEONTOLOGY (3). *Crosslisted as BIOS 466X.* Morphology, classification, paleogeography, stratigraphic application, and geochemistry of calcareous, siliceous, and phosphatic microfossils. PRQ: BIOS 205 and GEOL 320, or consent of department.

475. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as BIOS 484X, CHEM 490X, and PHYS 490X.* Examination of major concepts of science and how they evolved. Comparison and contrast of the role and practice of science in various cultures and examination of the interaction between science, technology, and culture. PRQ: GEOL 120A, or GEOL 120 and GEOL 121, or consent of department.

477. FIELD METHODS IN ENVIRONMENTAL GEOSCIENCES (4). Field camp designed to train students in field methods and integrative problem solving related to environmental geosciences covering topics such as field methods in hydrogeology, surface-water and vadose-zone hydrology, water quality analysis, ecosystem health, environmental surface geophysics, site evaluation and techniques, and regional landscape history and environmental change. Offered during summer session only. PRQ: GEOL 325, GEOL 330, GEOL 335, and either GEOL 390 or GEOL 490, or consent of department.

478. GEOLOGIC FIELD WORK (3). Field camp. Offered during summer session only. PRQ: GEOL 330 and GEOL 335. CRQ: GEOL 479.

479. GEOLOGIC FIELD WORK (3). Continuation of field camp. CRQ: GEOL 478.

480. THEORETICAL PETROLOGY (3). Origin of igneous and metamorphic rocks with emphasis on theoretical principles of phase equilibria, thermodynamics, kinetics, and elemental and isotopic evolution and partitioning. PRQ: GEOL 325 or consent of department.

481. SEDIMENTARY PETROLOGY (3). Emphasis on laboratory analysis of siliciclastic and carbonate rocks to determine depositional and diagenetic histories. Lectures and two-hour laboratory per week. PRQ: GEOL 325 and GEOL 330, or consent of department.

482. TRANSITION TO THE PROFESSIONAL EARTH SCIENCE TEACHER(1). A transitioning experience in which the certification candidate achieves closure on the initial phase of professional preparation and, upon that foundation, charts a path for continuing professional growth as a practicing teacher. Candidate will reflect on the preparatory experience and complete documentation demonstrating ability to perform as a qualified earth science teacher. Such documentation will include, but not be limited to, the electronic portfolio, a professional development plan, and a resume. CRQ: GEOL 487 or consent of department.

483. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY EDUCATION (3). *Crosslisted as BIOS 402X, CHEM 493X, and PHYS 493X.* Methods and theory for the teaching of interdisciplinary science in grades 6-12. Exploration of the nature and purpose of science and its underlying assumptions, the social and cultural challenges in science teaching, and the potential solutions to these challenges through research, discussion, and reflection. Use of state and national science standards to develop student learning objectives and to design inquiry-based lesson plans, micro-teaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio.

484X. USE OF TECHNOLOGY IN SECONDARY SCIENCE TEACHING (2). *Crosslisted as PHYS 494.* Selected methods for the evaluation and use of technology in both the instructional and laboratory setting in secondary science education. Topics may include the interfacing of computers for data acquisition in the laboratory, strategies for integrating the Internet into the curriculum, and use of video/multimedia equipment. PRQ: Consent of department.

485. VOLCANOLOGY (3). Examination of volcanoes, types of volcanic eruptions, magma sources and storage, lava flows, and pyroclastic deposits. PRQ: GEOL 325 or consent of department.

485H. HONORS VOLCANOLOGY (3). The study of volcanoes and volcanic eruptions designed for non-geology major honors students. Includes considerations of magma, plate tectonics, pyroclastic phenomena, extraterrestrial volcanism, and eruption prediction.

486X. SCIENCE TEACHING IN THE ELEMENTARY, MIDDLE, AND JUNIOR HIGH SCHOOL: GRADES K-9 (3). *Crosslisted as PHYS 492.* Selected instructional methods and materials for teaching science in elementary, middle, and junior high schools with emphasis on the physical sciences. Analysis of modern curricula and practice in the use of associated laboratory materials developed for use at all level from grades K-9. Designed for the classroom teacher and pre-teacher, but open to science supervisors and administrators. PRQ: A general physical science course or equivalent and consent of department.

487. STUDENT TEACHING (SECONDARY) IN GEOLOGY/EARTH SCIENCE (7 to 12). Student teaching in grades 6-12, assignments made by the Department of Geology and Environmental Geosciences. Also see "Teacher Certification Requirements" for other regulations. PRQ: GEOL 495X and consent of department.

488. ENVIRONMENTAL CHANGE (3). Examination of physical, chemical, and biological processes that cause environments to change naturally or under the influence of human activities. Consideration of environments at several different size scales, from small water sheds/forests, to larger lake systems, to the global atmospheric-ocean system. Emphasis on the roles of positive and negative feedback in controlling the state of environments and their susceptibility to change. PRQ: Any 100- or 200- level BIOS, GEOG, GEOL course; CHEM 210T and CHEM 212; and MATH 229 or MATH 210; or consent of department.

489. UNDERGRADUATE RESEARCH (1 to 3). Independent work in geology under the direction of a faculty member. Open only to seniors. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

490. HYDROGEOLOGY (3). Comprehensive introduction to hydrogeology: groundwater occurrence, physics of flow, aquifer characteristics, basic groundwater chemistry, aspects of groundwater contamination, resources, and environmental hydrogeology. PRQ: Any 100- or 200-level geology course and MATH 211 or MATH 229, or consent of department.

491. GEOPHYSICAL WELL LOGGING (3). Qualitative and quantitative interpretation of electric, sonic, radioactive, and other well logs. Physical and electrical properties of saturated rock and soil applied to petroleum, mining, and groundwater exploration. PRQ: GEOL 496 or consent of department.

492X. HYDROLOGY (3). *Crosslisted as GEOG 492.* Quantitative examination of the properties, occurrence, distribution, and circulation of water near the earth's surface and its relation to the environment. Emphasis on applying fundamental physical principles to understand surface and subsurface hydrological processes. Lecture, laboratory, and field trip. PRQ: GEOG 101 and GEOG 102, or GEOL 120; and MATH 210 or MATH 229; and PHYS 150 or PHYS 210; or consent of department.

493. GROUNDWATER GEOPHYSICS (3). Survey of geophysical methods commonly employed in groundwater investigations. Applications of geophysics to groundwater exploration, contaminant migration, and aquifer evaluation as well as the theoretical basis for surface and borehole geophysical measurements. Case histories to illustrate field procedures and interpretation methods. PRQ: GEOL 490, MATH 230, and PHYS 273.

494. SPECIAL TOPICS IN GEOLOGY AND ENVIRONMENTAL GEOSCIENCES (1 to 3). Lectures, discussion, readings, and reports on topics of special interest in a particular field of geology. May be repeated to a maximum of 6 semester hours. Open to seniors only. PRQ: Consent of department.

495X. TEACHING OF PHYSICAL SCIENCES (3). *Crosslisted as PHYS 495.* Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula: classroom and laboratory organization: microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; methods of evaluation. PRQ: Consent of department. CRQ: ILAS 401.

496. GEOPHYSICS (3). Intended for majors in all areas of geology. Introduction to the basic principles of geophysical techniques applicable to the solution of geological and environmental problems that range in scale from local to global. PRQ: MATH 211 or MATH 229 and PHYS 210 or PHYS 253, or consent of department.

497. REGIONAL FIELD GEOLOGY (1 to 3). Extended field trips to regions of broad geologic interest. Emphasis on understanding the region as a whole, as well as its relationships to adjacent areas. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

498. SENIOR THESIS (1 to 3). Independent research on a geological problem under the direction of a faculty adviser leading to the completion of a written report and oral presentation to a thesis committee. May be repeated to a maximum of 6 semester hours.

499H. SENIOR THESIS - HONORS (1 to 3). Independent research for honors students on a geological problem under the direction of a faculty adviser leading to the completion of a written report and oral presentation to a thesis committee. May be repeated to a maximum of 6 semester hours.

Geology and Environmental Geosciences Faculty

Jonathan H. Berg, Ph.D., University of Massachusetts, Distinguished Research Professor, chair
James A. Walker, Ph.D., Rutgers University, professor, assistant chair
Colin J. Booth, Ph.D., Pennsylvania State University, professor
Phillip J. Carpenter, Ph.D., New Mexico Institute of Mining and Technology, professor
Mark P. Fischer, Ph.D., Pennsylvania State University, associate professor
Mark R. Frank, Ph.D., University of Maryland, assistant professor
B. Kathleen Kitts, Ph.D., Washington University, St. Louis, assistant professor
Melissa E. Lenczewski, Ph.D., University of Tennessee, assistant professor
Paul Loubere, Ph.D., Oregon State University, Distinguished Research Professor
Carla W. Montgomery, Ph.D., Massachusetts Institute of Technology, associate professor
Eugene C. Perry, Jr., Ph.D., Massachusetts Institute of Technology, professor
Ross D. Powell, Ph.D., Ohio State University, Distinguished Research Professor
Reed P. Scherer, Ph.D., Ohio State University, associate professor
Paul R. Stoddard, Ph.D., Northwestern University, associate professor
Jay A. Stravers, Ph.D., University of Colorado, associate professor

Department of History (HIST)

Major in History (B.A. or B.S.)

Requirements in Department (37)

Two of the following (6)
- HIST 110 - Western Civilization to 1500 (3)
- HIST 111 - Western Civilization: 1500-1815 (3)
- HIST 112 - Western Civilization Since 1815 (3)
- HIST 140 - Asia to 1500 (3)
- HIST 141 - Asia Since 1500 (3)
- HIST 171 - The World Since 1500 (3)

Two of the following (6)
- HIST 260 - American History to 1865 (3)
- HIST 261 - American History Since 1865 (3)
- HIST 270 - The African-American to 1865 (3)
- HIST 271 - The African-American Since 1865 (3)

Seven courses at the 300-400 level from courses in the following fields with a maximum of four courses in any field (21)
- Ancient and medieval history
- Asian and African history
- European history (including British)
- Global History
- Latin American history
- Russian history
- United States history

HIST 491[1] - Senior Thesis (4)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree

Laboratory science/mathematical/computational skills sequence (10-15)
(See "College Requirement for the B.S. Degree")

Total Hours for a Major in History: 37-49 (B.A.) OR 47-52 (B.S.)

Teacher Certification

Students who want to be certified to teach history in grades 6-12 should declare their intention with the department's office of teacher certification at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in history.

Admission

Students are admitted to the certification program when they have

established a file with the department's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;

attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;

completed at least 6 semester hours of history at NIU and earned a minimum GPA of 3.00 in all history courses taken at the college/university level;

completed the core competency requirements in English and oral communication;

completed at least 20 clock hours of approved early clinical experiences; and

obtained approval from the department's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the department's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in history, including at least 8 semester hours in U.S. history. They also must complete HIST 496, History and Social Science Instruction in Grades 6-12, and HIST 400, Student Teaching in History/Social Sciences in Grades 6-12. Except in unusual circumstances, HIST 496 must be taken in the semester immediately prior to enrollment in HIST 400, and students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Other Requirements

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the department's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the department's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

A program of honors work in history is available to majors. Admission to the program is either by application of the student or by invitation of the department. Students who enter the program must have a cumulative GPA of at least 3.00 in all course work at NIU and at least 3.50 in history courses or be nominated by a faculty member and approved by the department's undergraduate committee. Ordinarily admission to the program should not be postponed beyond the first semester of the junior year. Transfer students interested in entering the program should seek nomination through the department's undergraduate adviser.

To graduate "With Honors in History," a student must be a history major, take a minimum of 18 semester hours of history honors courses, earn a grade of B or better in HIST 491, and maintain a minimum GPA of 3.00 in all course work and 3.50 in history courses. Most history honors courses are not separate courses but rather subsections of regular courses. HIST 491 will count toward the required 18 semester hours of honors work in history. Details concerning the Department of History's honors program can be obtained from the department's undergraduate adviser.

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* Available for general education credit.

[1] Students must successfully complete at least one 400-level NIU history course (excluding HIST 400, HIST 492, HIST 496, and HIST 497) before taking HIST 491. At least two such 400-level NIU history courses (excluding HIST 400, HIST 492, HIST 496, and HIST 497) are required to complete the major.

Minor in History (18)

Course work from the following (6-12)
*HIST 110 - Western Civilization to 1500 (3)
*HIST 111 - Western Civilization: 1500-1815 (3)
*HIST 112 - Western Civilization Since 1815 (3)
*HIST 140 - Asia to 1500 (3)
*HIST 141 - Asia Since 1500 (3)
*HIST 171 - The World Since 1500 (3)
*HIST 260 - American History to 1865 (3)
*HIST 261 - American History Since 1865 (3)
HIST 270 - The African-American to 1865 (3)
HIST 271 - The African-American Since 1865 (3)
Electives at the 300-400 level (6-12)

At least 6 semester hours of 300-/400-level courses must be taken at NIU.

Foreign Study in History

The Department of History encourages students to take advantage of study-abroad programs, which provide students of history and allied disciplines an opportunity to study first hand the historical development and traditions of other peoples and their cultures. Interested students should first consult the Office of International Programs for details of forthcoming programs and then contact their undergraduate adviser in history about including their study-abroad courses in their NIU program. For further information, see “International Programs” in the Other Academic Units Department.

Course List

General

110. WESTERN CIVILIZATION TO 1500 (3). Examination and interpretation of major historical developments in the Ancient Near East, Classical Greece and Rome, and Medieval Europe.

111. WESTERN CIVILIZATION: 1500-1815 (3). Examination and interpretation of the major historical changes which took place in Europe between the time of the Renaissance and the Age of the French Revolution.

112. WESTERN CIVILIZATION SINCE 1815 (3). Examination and interpretation of the European historical developments since the French Revolution which have molded the world as we know it today.

140. ASIA TO 1500 (3). Political and cultural history of India, China, and Japan with discussion of the origins, development, and importance of major Asian religions. May not be taken pass/fail.

141. ASIA SINCE 1500 (3). Major developments in Asia since the arrival of the Europeans, with emphasis on the changes in Asian civilizations resulting from European technology, political ideas, and economic relations. May not be taken pass/fail.

171. THE WORLD SINCE 1500 (3). The human community in an era of global integration. Impact of industrialization and imperialism, migration of populations and capital, and revolutionary changes resulting from the dissemination of ideologies, diseases, weapons, and advanced forms of transportation and communication throughout the world. Instructor emphasis on particular themes and parts of the world to illustrate global trends in accordance with individual expertise and interests.

260. AMERICAN HISTORY TO 1865 (3). Central developments in American history from Old World backgrounds through the Civil War.

261. AMERICAN HISTORY SINCE 1865 (3). Central developments in the history of the United States since the end of the Civil War.

400. STUDENT TEACHING (SECONDARY) IN HISTORY/SOCIAL SCIENCES (12). Student teaching for one semester. Assignments arranged with the department’s office of teacher certification.PRQ: HIST 496 and permission of the department’s office of teacher certification.

491. SENIOR THESIS (4). Capstone of the history major, involving advanced practice in the craft of the professional historian. All sections of course organized as seminars, and participants engage primarily in writing and presenting a paper based on their own research. Extensive library/archival work. In addition, each student meets for one hour each week with his or her research adviser.PRQ: History major, senior standing, successful completion of at least one 400-level NIU history course (excluding HIST 400, HIST 492, HIST 496, and HIST 497), and consent of department.

492. PRINCIPLES OF PUBLIC HISTORY (3). Introduction to the practical application of historical knowledge in such areas as historic preservation, manuscript and archival management, editing, genealogy and family history, oral history, and museum work.PRQ: Consent of department.

493H. HONORS (1 to 3). Seminar covering special problems in the analysis of various fields and problems of history. Open only to upper-division students who have been admitted to honors work in history.

494H. HONORS (3). Continuation of HIST 493H. May be repeated to a maximum of 9 semester hours.

496. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as ANTH 496X, ECON 496X, GEOG 496X, POLS 496X, PSYC 496X, and SOCI 496X.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels.PRQ: Admission to the history or social science teacher certification program and permission of Department of History’s office of teacher certification.

497. ORAL HISTORY (3). Introduction to the theory and practice of interviewing as a way of creating, documenting, and interpreting historical evidence. Attention given to systematic analysis and the practice of editing, indexing, recording, preserving, and transcribing tapes and to the application of oral history to historical research and writing.

498. SPECIAL TOPICS IN HISTORY (3).
A. Ancient
B. Medieval
C. Early Modern European (including British)
D. Modern European (including British)
E. Russian and Eastern European
G. African
J. Asian
M. United States
N. Latin American
R. General/Comparative
U. Global
Selected themes or problems. Topics announced. May be repeated when subject varies.

Ancient and Medieval History

300. THE ANCIENT NEAR EAST (3). Introduction to the peoples and cultures of Babylonia-Assyria, Egypt, Anatolia, Syria-Palestine, and Persia. From the Early Bronze Age through the conquests of Alexander the Great.

301. HISTORY OF ANCIENT GREECE (3). Survey of Ancient Greece including the Bronze Age, Minoan-Mycenaean civilization, Hellenic civilization and the Classical Age.

302. AGE OF ALEXANDER THE GREAT (3). Greek and Near Eastern world from 404 B.C.E. to 31 B.C.E., centering on conquests of Alexander and the spread of Greek culture throughout western Asia and Egypt. Themes include individual human experience in the Hellenistic Age, rise of new religious and philosophical movements, interaction of Greco- Macedonian civilization with conquered cultures, transformation of economy and society throughout eastern Mediterrean and western Asia, and challenges presented by the advent of Rome.

303. HISTORY OF ANCIENT ROME (3). Survey of the rise of Rome from a small Latin village to a cosmopolitan empire embracing large parts of Western Europe, Western Asia, and North Africa.

* Available for general education credit.

305. EUROPE IN THE EARLY MIDDLE AGES (3). Survey of the formation of Medieval Europe from the decline of the ancient world to the late-10thcentury revival.

306. EUROPE IN THE LATER MIDDLE AGES (3). Continuation of HIST 305. Survey of the renewal of town life, the age of scholasticism, the development of monarchies and parliaments, the flowering of art and architecture.

408. MEDIEVAL EVERYDAY LIFE (3). Examination of economic and social changes underlying the formation of medieval civilization. Attention given to demographic change, urbanization, and social movements.

European History

312. FRANCE SINCE 1815 (3). French society, government, and culture from the fall of Napoleon I to the present, emphasizing the revolutionary heritage, the coming of industrialism and democracy, the rise and fall of the French colonial empire; the ordeal of France in the 20th century.

313. GERMANY SINCE 1815 (3). Survey of the Napoleonic era, the rise of Prussia, nationalism and unification, power politics, imperialism, two world wars, and national socialism and its aftermath, against the background of the age of absolutism and of revolution.

315. SPAIN SINCE 1475 (3). Emphasis on the rise of Spain as a great power and its decline in the 17th century, the Spanish struggle for liberalization, the Spanish Civil War, and the social, economic, and political problems of contemporary Spain.

320. THE CATHOLIC CHURCH SINCE 1545 (3). History of the Roman Catholic Church in Western Europe from the Council of Trent to the Second Vatican Council. Topics include the Council of Trent, sacramentalism, the Inquisition, dechristianization, and religious revival.

322. WOMEN IN MODERN EUROPE (3). Critical examination of the experiences, achievements, and representations of women of all classes as well as the gendering of politics and culture since the 18th century. Use of a comparative approach in studying women from Great Britain in the west to Russia in the east whenever possible.

323. HISTORY OF SCIENCE TO NEWTON (3). Science in the ancient Near East; Hellenic and Hellenistic science; the Arabs; medieval science; the Copernican revolution; the new physics; and the new biology.PRQ: At least sophomore standing.

324. HISTORY OF SCIENCE SINCE 1650 (3). Newtonian astronomy, chemistry from Boyle to Mendeleer, the life sciences in 18th and 19th centuries, geology and evolution, physics from the 18th to the early 20th centuries.

326. 19TH CENTURY EUROPE (3). Analytical survey of important developments in the political, social, economic, and intellectual history of Europe from the French Revolution to World War I, including revolutions, revolutionary ideologies, industrialization, nationalism, and changes in gender and class relations and the roles of women.

327. EUROPE, 1900-1945 (3). Cultural, diplomatic, political, and social history of Europe from the beginning of the 20th century to the end of the Second World War, emphasizing the origins of the First World War, the Paris Peace Conference, the rise of fascism, and the competing totalitarian ideologies of World War II, as well as changes in gender and class relations and in the roles of women and families.

328. EUROPE, 1945-PRESENT (3). Culture, diplomacy, policy, and society in Europe since the Second World War, including postwar continuity and change in domestic and foreign policy, the domestic implications of decolonization, student and other radical politics, the changing role of women and family, the fall of Communism, and the move toward European integration.

413. FAMILY, SEXUALITY, AND SOCIETY SINCE 1400 (3). History of the family in Western society as seen in household structures, marriage customs, childbirth and child rearing, sex roles, the life-cycle, and attitudes towards sexual deviance.

415. EUROPEAN THOUGHT IN THE 17TH CENTURY (3). European and British thought of the 17th century; the rise of modern science; and baroque and classical art and literature.

416. THE AGE OF ENLIGHTENMENT (3). Various main aspects of the intellectual revolution that preceded the American and French Revolutions, including the growth of secularism and rationalism, the rise of scientific thought, the formulation of political liberalism and radicalism, and the enrichment of the humanist tradition.

417. EUROPEAN CULTURAL HISTORY 1780-1870 (3). Arts and letters of the Enlightenment, Romantic, and Victorian periods, including work by Rousseau, Shelley, Darwin, Marx, Dostoevsky, Flaubert, Zola, Impressionists, and Wagner.

418. EUROPEAN CULTURAL HISTORY 1870-PRESENT (3). Major thinkers of the modern period on the meaning of existence: Nietzsche, Freud, Sartre, Simone de Beauvoir. Modernism in literature and art: Conrad, Mann, Kafka, Proust, Joyce, Woolf, Cezanne, Picasso.

419. HISTORY OF MARXIST THOUGHT AND WRITING (3). Analytically oriented course elucidating the historical corpus of Marx and the historiography which has developed from it.

420. THE RENAISSANCE (3). Social, political, and ideological breakdown of medieval Europe with consideration of the reaction of the new class of artists and intellectuals to the special problems of their age.

421. THE CATHOLIC AND PROTESTANT REFORMATIONS (3). Examination of the religious reforms and institutional breaks, Catholic and Protestant, official and heretical, which ended the medieval unity of Christendom.

422. EARLY MODERN EUROPE (3). Analytical survey emphasizing the changing role of European nobilities, the construction of absolute monarchies, the rise of capitalism, baroque civilization, and the interaction of learned and popular culture.

423. THE FRENCH REVOLUTION AND NAPOLEON (3). Origins of the Revolution of 1789; moderate and radical phases; the Terror and the Thermidorian reaction; the rise of Napoleon; the Napoleonic wars and the remaking of Europe; the revolutionary legacy.

424. HABSBURG MONARCHY, 1815-1918 (3). Cultural, political, social, and diplomatic history of the Habsburg lands from the zenith of the monarchy at the Congress of Vienna to its destruction at the end of the First World War. Topics include the Congress of Vienna, the revolutions of 1848, the growth of national identity and class antagonisms, and cultural continuity and change.

426. EAST CENTRAL EUROPE, 1914-PRESENT (3). Cultural, political, and social history of Austria, Czechoslovakia, Hungary, Poland, and Romania from the beginning of the First World War to the present. Topics include the First and Second World Wars, anti-Semitism, fascism, modernism, and the Prague Spring.

428. EUROPEAN DIPLOMATIC HISTORY SINCE 1914 (3). Great power rivalries and competition for empire; two world wars and their consequences; decolonization; cold war and the division of Europe.

429. NAZI GERMANY (3). History of National Socialism from the origins of the party to the end of World War II. Emphasis on the means used for seizing and consolidating power; social, cultural, and foreign policies of the Third Reich; anti-Semitism and the Holocaust.

Russian History

336. MEDIEVAL RUSSIA: ORIGINS TO 1682 (3). Survey of medieval Russia, from the origins of Kievan Rus' (claimed by the Russians, the Belarus, and Ukrainians as their mother state) to the end of the Muscovite period. Emphasis on politics, economics, culture, and society.

337. HISTORY OF RUSSIA: 1682-1917 (3). Political, social, economic, and cultural history of the rise of the westernized Russian state to the destruction of the monarchy in 1917. Emphasis on the peasantry, class relations, gender, women, and empire-building.

338. HISTORY OF RUSSIA: 1917-PRESENT (3). Political, social, economic, and cultural history of the Russian Revolutions of 1917, the Soviet Union, and the Russian Federation. Issues of empire, class, gender, and promises of women's equality.

434. THE RUSSIAN REVOLUTION (3). Causes and consequences of the Bolshevik triumph in the Russian Revolution. Emphasis on the conflict of historical forces and personalities in the three revolutions between 1905- 1917, and on the international context.

435. STALIN AND STALINISM (3). Stalin's role as a revolutionary before 1917, his career to his death in 1953, and his legacy in Russia today. Focus on the political, economic, cultural, and moral issues associated with Stalin's rule over the Soviet Union.

Asian and African History

340. ANCIENT INDIA (3). Indian civilization from prehistory to the beginnings of European colonialism. Emphasis on the growth of Hindu political, social, philosophical, and artistic traditions; kings and commoners, castes and tribes, gods and temples. Attention will also be paid to the Buddhist and Islamic traditions.

341. HISTORY OF INDIA: 1740-1947 (3). The British challenge to the traditional Indian society and the Indian response; the Mutiny; the emergence of Indian nationalism; devolution of power and partition.

342. HISTORY OF SOUTHEAST ASIA TO CA. 1800 (3). Development of several Southeast Asian civilizations from the earliest known history through the end of the 18th century. Emphasis on the old Indonesian kingdoms and the states of the Mekong River valley with attention given to the cultural influences associated with Hinduism, Buddhism, and Islam.

343. HISTORY OF SOUTHEAST ASIA SINCE CA. 1800 (3). The several nations of Southeast Asia in the 19th and 20th centuries with emphasis on their reaction to European imperialism, Western science and technology. Principal topics include nationalism, socialism, the struggle for independence, and problems of modernization.

344. HISTORY OF ANCIENT CHINA (3). Formation of Chinese society and civilization from its origin to the 10th century A.D.

345. HISTORY OF CHINA SINCE THE T'ANG DYNASTY (3). Chinese civilization at its height and its crisis in the modern world under the impact of the West.

346. WOMEN IN ASIAN HISTORY (3). Social roles, challenges, and achievements of Asian women, primarily in the 19th and 20th centuries. Emphasis within the larger Asian framework will reflect the knowledge of particular instructors, but typically will highlight two or more contrasting Asian countries to be examined in detail: India, Pakistan, Thailand, Vietnam, Indonesia, the Philippines, China, or Japan; occasionally others. For a description of the focus of a particular section, consult the department.

347. SOUTH ASIA PAST AND PRESENT (3). Introduction to the colonial legacy and recent history, social and cultural institutions, religions, and other features of life in India and its closest neighbors, especially Pakistan and Bangladesh.

348. AFRICAN HISTORY TO 1600 (3). African history and civilization before European colonization. Emphasis on ancient kingdoms, kinship and social organization, religion and cosmology, intraregional trade and migration, oral tradition, and the cultural unity of precolonial Africa.

349. AFRICAN HISTORY SINCE 1600 (3). Modern African history. Emphasis on colonization and the colonial empire. The fight for independence and liberation; the development of economic dependence and neocolonialism; and the emergence of modern African nations.

350. JAPAN TO 1600 (3). Survey of ancient and medieval Japanese civilization. Beginnings of the imperial institution, early influences from the Asian continent, political transformations from aristocratic to warrior rule, and the development of what is now known as "Japanese tradition."

351. JAPAN SINCE 1600 (3). Survey of modern Japanese history. The nation-building efforts since the Tokugawa Shogunate. Topics include political centralization, encounters with the West, nationalism, imperialist expansion in Asia, and the rise of Japan as a global power.

352. POPULAR CULTURE IN JAPAN (3). History of popular arts and culture in Japan, from the flowering of Genroku culture in the 17th century to the present, with an introduction to theories of popular culture (mass culture theory, culture industry, feminism, postmodernism) and issues of aesthetics. Topics include popular theater (kabuki and puppet theater), graphic art and advertising, cultural appropriations from the West, popular music and cinema, manga (comics) and anime (animation), and fantasy and apocalyptic themes.

353. WOMEN IN AFRICAN HISTORY (3). History of African women from ancient times to the present, including gender roles in social, economic, and political institutions.

445. THE CHINESE REVOLUTION (3). Intellectual and social backgrounds of the Nationalist revolutionary movement; political history of the revolutionary period to the present.

446. HISTORY OF THAILAND (3). History and culture of Thailand from the prehistoric period to the present, with appropriate references to Thai relations with Laos and Cambodia.

447. HISTORY OF BURMA (3). History and culture of Burma from prehistoric times to the present.

448. HISTORY OF INDONESIA (3). Indonesian political, social, and cultural life from prehistory to the present. Attention given to the cultures of various peoples of Indonesia and the efforts of the modern state to create a national sense of identity.

449. HISTORY OF MALAYSIA AND SINGAPORE (3). The Malay world from prehistory to the present. Topics include early Malay trade, classical Malay culture, British imperialism, Chinese immigration, and the modern states of Malaysia, Singapore, and Brunei.

British History

356. MODERN IRELAND (3). Focus on developments since the late 18th century including contemporary Northern Ireland; Anglo-Irish relations; the complex links between religion, nationalism, and identity; and the relationship between uneven economic development and emigration.

357. BRITAIN TO 1688 (3). Survey of British history from the Norman Conquest to the Glorious Revolution. Interaction between various nations in the British Isles, English state development and law, and the links between religion and popular culture.

358. BRITAIN SINCE 1688 (3). Survey of British history from the Glorious Revolution to the present. Changing notions of citizenship, industrialization and its impact on British men and women, and the connections between nation, empire, and identity.

450. TUDOR AND STUART ENGLAND (3). Constitutional and legal foundations of bourgeois England; Elizabethan and Jacobean culture; and the origins of capitalism.

452. EMPIRE AND NATION IN MODERN BRITAIN (3). Interaction between empire and nation in Britain from the 18th century to the present. Impact of the "New British History" on how we view the British past, the relationship between industrialization and imperial expansion, the gendering of nation and empire, and the impact of decolonization on evolving notions of British identity.

454. INDUSTRY, STATE, AND SOCIETY IN MODERN BRITAIN (3). Impact of industrialization on British society between 1750 and 1914. Working class formation and elite reaction, urbanization, shifting conceptions of gender and work, and the changing nature of the state.

United States History

270. THE AFRICAN-AMERICAN TO 1865 (3). Survey emphasizing the heritage, culture, and historical role of African-Americans and the problem of race relations in our national life to 1865.

271. THE AFRICAN-AMERICAN SINCE 1865 (3). Survey emphasizing the heritage, culture, and historical role of African-Americans and the problems of race relations in our national life since 1865.

359. HISTORY OF ILLINOIS (3). Society, economy, and politics of Illinois from prehistory to the present. Topics start with Native Americans and the beginning of French exploration and colonization, and end with Illinois in the 21st century.

360. RACE, CLASS, AND GENDER IN AMERICAN HISTORY (3). Multicultural history of North America, 1600 to the present, with emphasis on race, class, and gender as both subjects of and forces in that history. Topics include Native American work and gender systems, slavery, industrial work, women and work, feminism, and sexuality.

361. HISTORY OF HEALTH AND MEDICINE IN THE UNITED STATES (3). Historical relationships between health care, society, and politics in the United States. Changing conceptions of health and illness; impact of infectious and chronic diseases since the colonial period; traditional healing practices and their displacement by medical professionalization; the creation of health care institutions; medicine in wartime; history of racial, class, and gender differences in health care practice and delivery.

362. THE EVOLUTION OF AMERICAN POLITICAL PARTIES (3). Focus on the historical role of political parties in American society and deals with the ways in which ethnic, religious, sectional, and class conflict have been expressed through political behavior, and the changing modes of that expression in the 19th and 20th centuries.

363T. U.S. SPORT HISTORY (3). Development of sport in the United States from the colonial era to the present, including the emergence of sport cultures, professional sports, and racial, gender, class, and political issues.

364. RELIGION IN AMERICA TO 1865 (3). The transplanting of European denominations to the New World; their transformation under American conditions; the rise of indigenous faiths; relations between the churches and society and between church and state; the impact of revivalism on social reform.

365. RELIGION IN AMERICA SINCE 1865 (3). Impact of modernism upon traditional beliefs; rise of social concern; religious pluralism in America and forces making for unity; 20th century theological trends. Examination of denominations both "mainstream" and otherwise; relationship of religion to social reform movements.

366. AMERICAN THOUGHT AND CULTURE TO 1865 (3). America's intellectual heritage from Western civilization and the change in that heritage which entered into the development of an American ideology.

367. AMERICAN THOUGHT AND CULTURE SINCE 1865 (3). Traditional American ideas and concepts in relation to the intellectual challenge arising from America's transition to a secular, urban-industrial society during the past century.

368. THE HISTORY OF CHICAGO (3). Survey of the history of Chicago, emphasizing the city's social structure, its economic, political, and cultural development, and the changing meaning of locality and community.

369. WOMEN IN UNITED STATES HISTORY (3). Social, economic, and intellectual roles of women from the colonial period to modern times. Organization and function of the women's rights movement, and the dynamics of change in the lives of "ordinary" women, particularly in familial and occupational settings.

370. INTRODUCTION TO AMERICAN INDIAN HISTORY (3). Introduction to traditional and contemporary American Indian cultures. Emphasis on religion, literature and arts, Indian-white contact, the Indians' unique relationship to the federal government, and contemporary issues facing American Indian reservations.

371. THE AMERICAN WEST (3). History of the American West since 1500, emphasizing sociocultural, economic, environmental, technological, and political change, with attention to the West as myth and reality.

372. HISTORY OF THE SOUTH (3). Southern institutions and the influence of southern sectionalism in national affairs; particular attention to social and political relations in the South from colonial times to the present.

373. HISTORY OF 20TH CENTURY AMERICAN POLITICS (3). Survey of government and politics in the United States since 1900. Emphasis on political institutions, policy issues, and problems of historical interpretation.

374. LATINOS IN THE UNITED STATES (3). Historical experiences of people of Mexican, Puerto Rican, and Cuban descent in the United States. Themes include immigration, regional labor markets, formation of internal colonies, and political and cultural developments.

375. CIVIL RIGHTS MOVEMENT, 1954-1974 (3). The African-American civil rights movement and the interrelationships among organizations, leaders, communities, and governments.

376. EVOLUTION OF AMERICAN CAPITALISM (3). Historical development of American capitalism through the stages of mercantilism, laissez-faire, and contemporary corporate capitalism. Emphasis on major economic ideas, institutions, and groups within each stage.

377. AMERICAN ENVIRONMENTAL HISTORY (3). History of the ecosystems of the United States, 1600 to the present, and of the 20th century conservation and environmental movements. Topics include Indian ecology, farming and ecology, and the urban environment.

378T. ASIAN-AMERICAN HISTORY (3). Comparative history of Asian immigrants and their descendants in the United States from the mid-19th century to the present. Focus on national and international migration contexts; ethnic group formation, persistence, and change; labor, class, gender, kinship, generation, race, and pan-Asian identity; state policies, including exclusion, repatriation, internment, quotas and preferences, refugee resettlement, and citizenship; interethnic and pan-Asian interaction, and transnational citizenship.

379. AMERICAN MILITARY HISTORY (3). History of the American military experience from colonial times to the present.

380. U.S. CONSTITUTIONAL HISTORY (3). Examination of the formation and adoption of the U.S. Constitution and Bill of Rights as well as the subsequent evolution of the U.S. constitutional system of government. Emphasis on the impact of the Civil War, the Progressive Era, the New Deal, and recent developments as well as evolving government powers and responsibilities, citizens' rights and duties, and federalism.

460. COLONIAL AMERICA (3). Native American, European, and African contacts and the establishment of a colonial society based upon conquest, slavery, and resistance, as well as struggles for freedom and opportunity.

461. THE AMERICAN REVOLUTION (3). The causes of the Revolution and its impact on the political, economic, cultural, intellectual, and social aspects of American life.

462. EARLY AMERICAN REPUBLIC (3). Tumultuous early years of the United States, from the Constitution to the eve of abolitionism, with a focus on politics, slavery, and conflict.

463. ANTEBELLUM AMERICA (3). United States' economic, political, social, and cultural expansion in the mid-19th century, and the explosive tensions that would plunge the nation into civil war.

464. CIVIL WAR AMERICA (3). The roots of the conflict of war and emancipation, national and regional reconstruction, and economics and race in the post-war period.

465. INDUSTRIAL AMERICA: 1877-1901 (3). Impact of industry and the city on vital aspects of American life and society, with emphasis on the response of farmers, workers, politicians and intellectuals to the problems of an emerging urban-industrial society.

466. CORPORATE AMERICA: 1900-1929 (3). The U.S. in the era of Theodore Roosevelt, Woodrow Wilson, and Herbert Hoover. Topics include the rising corporate order, labor militance, the origins of the modern state, America's response to war and revolution, 1920s style prosperity, and the Great Crash.

467. LIBERAL AMERICA: 1929-1961 (3). The U.S. in the Great Depression, World War II, and the Cold War. Topics include Franklin D. Roosevelt and the New Deal, the road to Pearl Harbor, total war, social and political change in mid-century America, the Truman Doctrine and Stalinism, the Korean War, the Fifties, civil rights, the Eisenhower presidency, and the American response to revolutions in East Asia.

468. AMERICA SINCE 1960 (3). Analysis of social, economic, political, cultural, and intellectual trends from the Kennedy years through the post-Cold War era. Topics include the civil rights movement, the Kennedy-Johnson foreign policies toward Cuba and East Asia, the Great Society programs, the Vietnamese civil war, the "counterculture Nixon and Watergate, the Reagan years, and the Persian Gulf conflict and the 1990s.

469. THE VIETNAM WAR (3). History of the American involvement in Vietnam between 1940 and 1975 that examines the evolving circumstances and policies leading to the American defeat.

471. WORKERS IN U.S. HISTORY, 1787-PRESENT (3). Role of workers in U.S. history from the early national period to the present. Emphasis on working class formation, labor conflict, and power relations in developing capitalist economy, how class, race and gender shaped workers' experiences; rise and decline of labor unions; the role of law and government in limiting or expanding workers' power

472. TOPICS IN AFRICAN-AMERICAN HISTORY (3). Selected problems in interpretation relating to the history of people of African descent in the Americas. Emphasis on African-American populations of the United States and some attention is given to the question of race relations. May be repeated to a maximum of 6 semester hours when subject varies.

473. TOPICS IN WOMEN'S HISTORY (3). Selected issues in interpretation relating to the history of women and gender relations. May be repeated to a maximum of 6 semester hours when subject varies.

474. HISTORY OF IMMIGRATION AND ETHNICITY (3). Survey of the nature and impact of immigration in American history from the colonial era to the present focusing on ethnic group origins, persistence, modification, and interaction. Includes comparative analysis of European, Latino, and Asian immigration. Examination of assimilation, acculturation, and accommodation theories, nativism, immigration legislation, multiculturalism, and minority relations.

475. THE UNITED STATES AND SOUTHEAST ASIA AND THE INDIAN SUBCONTINENT (3). Focus on 20th century, including American acquisition and governance of the Philippine Islands, the American response to nationalism and independence movements, the war in Vietnam, the successive tragedies in Cambodia, and U.S.-China rivalries in the region.

476. AMERICAN FOREIGN RELATIONS TO 1914 (3). Diplomacy of the American Revolution and the new nation, diplomatic aspects of the war with Mexico and continental expansion, and the rise of the United States as a world power in the late 19th and early 20th centuries, with emphasis on imperial expansion overseas.

477. AMERICAN FOREIGN RELATIONS SINCE 1914 (3). Diplomatic aspects of the two world wars, the origins and development of the Cold War in Europe and Asia, and the American response to Third World nationalism, including the war in Vietnam.

478. AMERICAN LEGAL HISTORY TO 1865 (3). American legal development, including English backgrounds, the colonial and revolutionary eras, and the evolution of the federal constitution to 1865, with consideration of the economic, political, and intellectual factors which have contributed to its growth.

479. AMERICAN LEGAL HISTORY SINCE 1865 (3). American legal development since 1865, including Reconstruction, the impact of the Industrial Revolution, and such significant 20th century constitutional issues as civil liberties, segregation, and the government's role in the economy.

Latin American History

381. COLONIAL LATIN AMERICA (3). Spanish and Portuguese colonial empires in America from their foundation through the wars for Latin American independence.

382. MODERN LATIN AMERICA (3). The Latin American states from the wars of independence to the present. Political, economic, and social institutions examined with attention to patterns of Latin American government.

383. LATIN AMERICA THROUGH FILM (3). Exploration of major themes in Latin American history from conquest to the modern day through film. Topics, examined through feature-length films and selected readings, include physical and spiritual conquest of Latin America, rural life, women, the family, the military, politics, capitalist modernization, authoritarianism, and revolution.

482. MEXICO SINCE 1810 (3). The quest for independence–political, economic, and cultural–with attention to the revolution of 1910-1920.

484. HISTORY OF BRAZIL (3). Survey of Brazilian history from first encounters between Europeans and Americans to the present; evolution of Brazil's politics, economy, society, and culture.

485. MODERN LATIN AMERICAN REVOLUTIONS (3). Major social revolutions of the 19th and 20th centuries, with emphasis on Mexico, Cuba, and Central America. Social, economic, and political causes, ideology, international influences, and current areas of conflict.

486. POVERTY AND PROGRESS IN LATIN AMERICA (3). Exploration of the persistent gap between rich and poor in Latin America and the poverty of Latin America relative to the developed world. Inquiry into how Latin America fell behind and other issues, including the legacy of colonialism, opportunities and limitations of the 19th century export booms, industrialization and urbanization in the 20th century, and distribution of burdens and benefits in Latin American society, polity, and economy.

Global History

319. THE EARLY ISLAMIC WORLD (3). Social, political, religious, and economic history of the early Islamic world from c. 500 to c. 1500. Topics start with Arab culture and society just prior to the life of Muhammad and end with the initial conquests of the Ottomans.

321. REVOLUTIONARY MOVEMENTS SINCE 1789 (3). Comparative and sociological analysis of the revolutions of the modern era with emphasis on the continuities of politics and thought, from France in the 1790s to contemporary European and non-European socialist movements.

325. WAR IN THE MODERN WORLD (3). History of warfare in the Western world from the age of Frederick the Great to the present.

388. PACIFIC ISLES SINCE 1600 (3). The islands of Polynesia, Melanesia, and Micronesia from earliest Euro-American contacts to the present. Emphasis on early cultural encounters and their effects on island peoples, the changing aims and perceptions of outsiders (explorers, missionaries, colonizers, authors, artists, and seekers of paradise), post-colonialism, and the contemporary issues facing island peoples. Emphasis on the Pacific as mythic realm and troubled reality.

390. FILM AND HISTORY (3). Historical analysis of film as evidence and representation. Examination of documentary, propaganda, historical, and fictional feature films across cultures, to explore how films recreate history for public consumption, the value and implications of film representation for national histories, and recent debates about both the validity of film as public history and the impact of film on historical writing.

398. THEMES IN WORLD HISTORY (3). Major themes or issues in world history. May be repeated to a maximum of 6 semester hours when subject varies.

402. GENDER AND SEXUALITY IN HISTORY (3). Evolution of gender and sexual identity, roles, and occupations in the industrializing world. Topics include the production of femininities and masculinities, sexual difference, interpersonal desire, kinds of friendship, romantic love, sexual ethics, and sexual orientation in history.

425. WORLD WAR II (3). History of World War II, including objectives and ideologies of Nazi Germany, Imperial Japan, and Allied Powers, with attention to cultural and social developments.

459. THE ATLANTIC WORLD, 1500-1800 (3). Encounters among African, European, and Native American men and women in the Atlantic world during the early modern era. Examination of major themes in political, economic, social, and cultural history in a comparative, integrated way to provide students of African, Latin American, European, and North American history with a broader context for understanding those regions.

470. AMERICA AND ASIA (3). Relationships between Asian nations and the United States. Topics include cultural and economic exchanges, experiences of Asian immigrants and their descendants in the U.S., competing strategic aspirations and value systems, and U.S. interventions in Asian wars. Emphasis varies according to instructor.

History Faculty

Kenton Clymer, Ph.D., University of Michigan, professor, chair
Anita M. Andrew, Ph.D., University of Minnesota, associate professor
E. Taylor Atkins, Ph.D., University of Illinois, associate professor
Jerome Bowers, Ph.D., Indiana University, assistant professor
Rachel H. Cleves, Ph.D., University of California, Berkeley, assistant professor
Sundiata Djata, Ph.D., University of Illinois, associate professor
Sean Farrell, Ph.D., University of Wisconsin, assistant professor
Heide Fehrenbach, Ph.D., Rutgers University, professor
Rosemary Feurer, Ph.D., Washington University, associate professor
Aaron S. Fogleman, Ph.D., University of Michigan, professor
Valerie L. Garver, Ph.D., University of Virginia, assistant professor
Michael J. Gonzales, Ph.D., University of California, Berkeley, professor
Anne G. Hanley, Ph.D., Stanford University, associate professor
Jason Hawke, Ph.D., University of Washington, assistant professor
Beatrix Hoffman, Ph.D., Rutgers University, associate professor
Eric Jones, Ph.D., University of California, Berkeley, assistant professor
David E. Kyvig, Ph.D., Northwestern University, Distinguished Research Professor
Vera Lind, D. Phil., Christian-Albrechts-Universität Kiel, associate professor
Eric W. Mogren, Ph.D., University of Michigan, associate professor
Barbara M. Posadas, Ph.D., Northwestern University, professor
Brian Sandberg, Ph.D., University of Illinois, assistant professor
James D. Schmidt, Ph.D., Rice University, associate professor
J. Harvey Smith, Ph.D., University of Wisconsin, associate professor
Nancy Wingfield, Ph.D., Columbia University, associate professor
Christine D. Worobec, Ph.D., University of Toronto, Presidential Research Professor

Department of Mathematical Sciences (MATH, STAT)

The Department of Mathematical Sciences offers the B.S. degree with a major in mathematical sciences with emphases in general mathematical sciences, applied mathematics, computational mathematics, probability and statistics, and mathematics education. Successful completion of the emphasis in mathematics education leads to certification to teach at the 6-12 grade levels.

The department also offers minors in mathematical sciences and in applied probability and statistics. These minors should be of interest to students majoring in the physical or social sciences or in business. In addition, the department offers an honors program in mathematical sciences and participates in the University Honors Program.

Students interested in the emphasis in probability and statistics, a degree with honors in probability and statistics, or a minor in applied probability and statistics should contact the office of the Division of Statistics.

Several of the department's courses fulfill the university mathematics core competency requirement, and others can be used by non-majors toward fulfilling the sciences and mathematics area requirement in the university's general education program. In addition, many of its courses are included as requirements for other programs.

Department Regulations

Mathematical sciences majors are not permitted to count courses in computer science (CSCI) toward fulfilling general education area requirements.

For all majors in the department, the GPA in the major is calculated by using only those mathematical sciences courses numbered 229 or above which are available for credit toward the major.

Department Requirements

Students majoring or minoring in mathematical sciences must obtain a minimum GPA of 2.00 in those MATH/STAT courses applicable to that major or minor. Courses not applicable to the major or minor are identified in the course descriptions. Some emphases and programs may have a higher GPA requirement; see the appropriate section of the catalog.

All majors are required to have a satisfactory portfolio of work done during their undergraduate studies on file in the Department of Mathematical Sciences. The contents of the portfolio are to be used to assess the department's program and are to be accumulated largely through course work assignments and examinations; students are expected to cooperate with instructors as these items are collected. In addition, each student must submit in his or her senior year a 250-300 word typed essay describing the student's experience in the major, including comments on the connections of mathematics with other disciplines. Details on the submission of materials and approval of the portfolio should be obtained from the student's adviser in the Department of Mathematical Sciences.

Mathematics Placement Examination Policy

Students planning to take MATH 110, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229 must take the Mathematics Placement Examination, so they may begin their mathematical studies at the appropriate level.

Proficiency Examination Policy

Ordinarily students will not be allowed to attempt a proficiency examination for a course if they have received credit for a higher numbered course (for exceptions, consult the department).

Major in Mathematical Sciences (B.S)

Emphasis 1. General

Requirements in Department (40-41)

MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 420 - Algebra I (3)
MATH 421 - Algebra II (3),
OR MATH 423 - Linear and Multilinear Algebra (3)
MATH 430 - Advanced Calculus I (3)
MATH 431 - Advanced Calculus II (3)
STAT 350 - Introduction to Probability and Statistics (3)
Two additional mathematical sciences courses numbered above MATH 333 (6-7)

Requirement outside Department (4)

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)

Total Hours for Emphasis 1, General: 44-45

Recommendations

MATH 440 - Elements of Complex Analysis (3)
MATH 450 - Introduction to Topology (3)
*PHYS 253 - Fundamentals of Physics I: Mechanics (4)

Emphasis 2. Applied Mathematics

Requirements in Department (40-41)

MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 336 - Ordinary Differential Equations (3),
OR MATH 334 - Foundations of Applied Mathematics (4)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 430 - Advanced Calculus I (3)
MATH 431 - Advanced Calculus II (3)
STAT 350 - Introduction to Probability and Statistics (3)
Two of the following (6)
MATH 420 - Algebra I (3)
MATH 434 - Numerical Linear Algebra (3)
MATH 435 - Numerical Analysis (3)
MATH 438 - Theory of Differential Equations (3)
MATH 439 - Engineering Mathematics II (3)
MATH 440 - Elements of Complex Analysis (3)
MATH 442 - Elements of Partial Differential Equations (3)
MATH 444 - Linear Programming and Network Flows (3)
MATH 460 - Modeling Dynamical Systems (3)
STAT 470 - Introduction to Probability Theory (3)
STAT 471 - Probability Models and Applications (3)
One additional mathematical sciences course numbered above MATH 333 (3)

Requirement outside Department (4)

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)

Total Hours for Emphasis 2, Applied Mathematics: 44-45

Special Requirement

Students in this emphasis are required to complete a minor selected with the approval of the department.

Emphasis 3. Computational Mathematics

Requirements in Department (40-42)

MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 420 - Algebra I (3)
MATH 430 - Advanced Calculus I (3)
MATH 434 - Numerical Linear Algebra (3)
MATH 435 - Numerical Analysis (3)
STAT 350 - Introduction to Probability and Statistics (3)
One of the following (3-4)
- MATH 380 - Elementary Combinatorics (3)
- MATH 423 - Linear and Multilinear Algebra (3)
- MATH 440 - Elements of Complex Analysis (3)
- MATH 444 - Linear Programming and Network Flows (3)
- MATH 496 - Seminar in Computational Mathematics (3)
- STAT 473 - Statistical Methods and Models I (3), and STAT 473A - Statistical Computing Packages (1)

One additional course from CSCI 440 (4), and CSCI 464 (4), and mathematical sciences (MATH/STAT) courses numbered above 333 (3-4)

Requirement outside Department (4)

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)

Total Hours for Emphasis 3, Computational Mathematics: 44-46

Emphasis 4. Probability and Statistics

Requirements in Department (40-41)

MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 430 - Advanced Calculus I (3)
STAT 350 - Introduction to Probability and Statistics (3)
STAT 470 - Introduction to Probability Theory (3)
STAT 472 - Introduction to Mathematical Statistics (3)
Two of the following (6-7)
- STAT 471 - Probability Models and Applications (3)
- STAT 473 - Statistical Methods and Models I (3), and STAT 473A - Statistical Computing Packages (1)
- STAT 474 - Statistical Methods and Models II (3)
- STAT 478 - Statistical Methods of Forecasting (3)

At least 3 additional semester hours from among the following courses (3-4)
- MATH 420 - Algebra I (3)
- MATH 423 - Linear and Multilinear Algebra (3)
- MATH 431 - Advanced Calculus II (3)
- MATH 434 - Numerical Linear Algebra (3)
- MATH 435 - Numerical Analysis (3)
- MATH 440 - Elements of Complex Analysis (3)
- MATH 444 - Linear Programming and Network Flows (3)
- MATH 450 - Introduction to Topology (3)
- STAT 471 - Probability Models and Applications (3)
- STAT 473 - Statistical Methods and Models I (3), and STAT 473A - Statistical Computing Packages (1)
- STAT 474 - Statistical Methods and Models II (3)
- STAT 478 - Statistical Methods of Forecasting (3)
- STAT 481 - Probabilistic Foundations in Actuarial Science (3)
- STAT 493 - Special Topics in Statistics (1 to 3)

Requirement outside Department (4)

CSCI 230 - Computer Programming in Fortran (4),
OR CSCI 240 - Computer Programming in C++ (4)

Total Hours for Emphasis 4, Probability and Statistics: 44-45

Internship opportunities in statistics are available with many employers, including pharmaceutical companies, insurance companies, manufacturing companies, and government agencies.

Emphasis 5. Mathematics Education

Successful completion of the emphasis in mathematics education leads to certification to teach at the 6-12 grade levels. In addition to the course work and certification requirements in the Department of Mathematical Sciences, students must complete other course work and certification requirements outside the department. A minor which includes a teaching endorsement in a teaching area outside of mathematics is highly desirable to enhance placement opportunities. All students who wish to pursue the emphasis in mathematics education and to seek teacher certification should consult with an adviser in the Department of Mathematical Sciences before the end of the sophomore year. Transfer and postbaccalaureate students should see an adviser in the Department of Mathematical Sciences on arrival. Graduate students majoring in the mathematical sciences, graduate students majoring in secondary education, and students-at-large should consult the *Graduate Catalog.*

Requirements in Department (43)

MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 353 - Geometry (3)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 401 or MATH 411 Clinical - (See “Clinical Experiences” below)
MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School (3)
MATH 412 - Methods of Instruction in the Mathematics Curriculum for Secondary School (3)
MATH 413 - (See “Clinical Experiences” below)
MATH 420 - Algebra I (3)
MATH 430 - Advanced Calculus I (3)
STAT 350 - Introduction to Probability and Statistics (3)
One of the following (3)
- MATH 380 - Elementary Combinatorics (3)
- MATH 416 - Topics in Mathematics for Teachers (3)
- MATH 434 - Numerical Linear Algebra (3)
- MATH 435 - Numerical Analysis (3)
- MATH 440 - Elements of Complex Analysis (3)
- MATH 444 - Linear Programming and Network Flows (3)
- MATH 450 - Introduction to Topology (3)
- MATH 480 - Number Theory (3)

One additional course from the following (3)
- MATH 421 - Algebra II (3)
- MATH 423 - Linear and Multilinear Algebra (3)
- MATH 431 - Advanced Calculus II (3)
- MATH 456 - Linear Geometry (3)
- MATH 480 - Number Theory (3)
- STAT 470 - Introduction to Probability Theory (3)

Special Departmental Requirements for Certification

Apply for admission to teacher certification in the Department of Mathematical Sciences. This is usually done three semesters prior to the semester of student teaching.

Pass the Basic Skills Test of the Illinois Certification Testing System in order to be formally admitted to the teacher certification program. This should be accomplished before taking MATH 412. The Mathematics Area Test of the Illinois Certification Testing System must be completed before the beginning of student teaching (MATH 413). An informational booklet about the test and registration materials for the test can be obtained from the Office of Testing Services.

Obtain departmental approval for admission to teacher certification. This is normally done through a conference with the coordinator of teacher certification in mathematics two semesters prior to the semester of student teaching.

Satisfy the minimum GPA requirements established by the department for the undergraduate emphasis in mathematics education: an overall NIU GPA of at least 2.50, a GPA of 2.25 or higher in all courses counted for credit toward the major, and a GPA of 2.25 or higher in all courses counted for credit toward the major numbered above MATH 231.

Requirements outside Department (26-32)

CSCI 230 - Computer Programming in FORTRAN (4),
  OR CSCI 240 - Computer Programming in C++ (4),
  OR an approved computer programming class focused on the use of FORTRAN, C, or C++ that contains a laboratory component (3-4)
Professional education requirements (23-28)
  EPFE 400[1] - Foundations of Education (3), or a course in the philosophy and/or history of education
  EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3),[1] or a course in human development and learning focusing on the middle school and high school years
  ETR 440 - Secondary Classroom Assessment (3),[1] or a course in the techniques of assessment
  TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)
  Clinical experiences and student teaching (11-16). For Illinois certification students must complete 100 clock hours of clinical experiences prior to student teaching. The requirement may be satisfied by completing the following sequence of courses.
  ILAS 201[2] - Introductory Clinical Experience (1)
  ILAS 301[3] - Second Clinical Experience (2), or ILAS 300 - Discipline-Based Clinical Experiences for the Illinois Standard High School Certificate (1-2)[usually taken in same semester as EPS 406]
  MATH 401[3,4] - Clinical Secondary School Experience in Mathematics (1-2)
MATH 413[5] - Student Teaching (Secondary) in Mathematics (7-12)

Additional Requirements (36-39)

In some cases these additional requirements exceed those required by the university for a baccalaureate degree. Therefore, students should consult with an adviser within the department as early as possible about meeting these requirements.

The teacher certification requirements are the same for undergraduate mathematical sciences majors with an emphasis in mathematics education and for postgraduate students seeking certification in mathematics without becoming a candidate for a degree.

Core Competency (9)
  Written communication, or equivalent of ENGL 105 (6)
  Oral communication (3)
Humanities (12)
  U.S. History (3)
  English course or literature course taught in English (3)
  Other approved course work (6)
Science (9)
  Course work in at least two science fields with a minimum of two courses in one science field; must include at least one science laboratory course
Social Science (6)
  U.S. Government (3)
  Other approved course work (3)
Cultural Diversity (3)
  EPFE 201 - Education as an Agent for Change (3),
    OR IDSP 211 - Educating for Cultural Sensitivity (3)

Documentation of the completion of a first aid course, experience with drug abuse education, or an education experience with other social issues in schools (may be satisfied by course work or an approved experience)

Other Requirements

See “Teacher Certification Requirements.”

Exit Examination

All students seeking certification must pass the Illinois certification examination. Information about this test may be obtained from the Office of Testing Services.

Degree with Honors

The Department of Mathematical Sciences offers the exceptional student an opportunity to earn a degree with honors in any of the five emphases. Any mathematical sciences student may become a candidate for an honors degree in mathematical sciences at the end of the sophomore year provided the student has a 3.00 or higher overall GPA and has a 3.50 or higher GPA in all mathematical sciences courses completed, including MATH 232 and MATH 240.

A student with these qualifications who wishes to become an honors degree candidate should go to the office of the Department of Mathematical Sciences (or, in the case of students in the emphasis in probability and statistics, to the office of the Division of Statistics) to fill out a candidacy form and be assigned an honors adviser. After the end of the sophomore year, a student showing exceptional talent may also become an honors degree candidate by obtaining consent.

Most 300-level and 400-level mathematical sciences courses may be taken as honors courses.

Requirements

Maintain a 3.00 or higher overall GPA.

Maintain a 3.50 or higher GPA for mathematical sciences courses numbered 300 and above.

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[1] Students should consult with an adviser in the Department of Mathematical Sciences before enrolling in courses to fulfill this requirement.
[2] Undergraduates must consult with the coordinator of teacher certification in mathematics about admission to ILAS 201 at the beginning of the second semester of their sophomore year. Postbaccalaureate students should consult with the coordinator of teacher certification in mathematics upon arrival.
[3] Students must consult with the coordinator of teacher certification in mathematics about admission to ILAS 300, ILAS 301, and MATH 401.
[4] If MATH 401 is not completed at the student teaching school, MATH 411, Secondary School Mathematics Clinical Experience (0), may be required.
[5] Admission to MATH 413 is dependent on the availability of resources. Students are normally admitted to MATH 413 only after satisfactory completion of MATH 412 at NIU and all other course work required for certification.

Take at least four mathematical sciences honors courses numbered 300 or higher, which must include a two-course sequence of 400-level honors courses appropriate for the student's emphasis and approved by the honors degree adviser. The honors sequences from which a sequence appropriate for the student's emphasis may be chosen are MATH 420H-MATH 421H, MATH 420H-MATH 423H, MATH 430H-MATH 431H, MATH 434H-MATH 435H, STAT 470H-STAT 472H.

In one of the 400-level honors courses, prepare and submit an independent study paper on a suitable topic. The paper must be approved by the instructor of the course and by the honors degree adviser.

Minor in Mathematical Sciences

Option 1. General (22-23)

*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
At least two mathematical sciences courses chosen from STAT 350 or from MATH courses numbered above MATH 333. At least one of these must be numbered above MATH 419 (6-7).

Six or more semester hours in the minor must be taken at NIU.

Option 2. Applied Mathematics (21-22)

*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 336 - Ordinary Differential Equations (3)
At least two mathematical sciences courses chosen from STAT 350 or from MATH courses numbered above MATH 338. At least one of these must be numbered above MATH 419 (6-7)

Six or more semester hours in the minor must be taken at NIU.

Option 3. Mathematics Education (29-31)

Provided that MATH 416 is not chosen as an elective, this option meets the minimal mathematics requirement for an endorsement to teach mathematics in grades 9-12 in Illinois. Provided that neither MATH 360 nor MATH 416 is chosen as an elective, and provided that the student also completes MATH 410, this option meets the minimal mathematics requirement for an endorsement to teach mathematics in grades 6-8 in Illinois. Students should contact the department for information about alternative ways of obtaining an endorsement which do not necessarily involve a minor.

*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
MATH 240 - Linear Algebra and Applications (4)
MATH 353 - Geometry (3)
MATH 412 - Methods of Instruction in the Mathematics Curriculum for Secondary School (3)
Select from the following (7-9)
CSCI 230 - Computer Programming in FORTRAN (4),
OR CSCI 240 - Computer Programming in C++ (4), but not more than one
MATH 304 - History of Mathematics Through the 17th Century (3)
MATH 360 - Model Building in Applied Mathematics (3)
MATH 416 - Topics in Mathematics for Teachers (3)
MATH 420 - Algebra I (3)
STAT 350 - Introduction to Probability and Statistics (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Elementary Mathematics Education (23)

This minor is available only to undergraduates majoring in elementary education. Students interested in pursuing the minor in elementary mathematics education should consult with an adviser in the Department of Mathematical Sciences before the end of the sophomore year. Transfers and postbaccalaureate students seeking a degree in elementary education should consult with an adviser on arrival. Provided that MATH 303 or MATH 304 is chosen as an elective, this minor meets the minimal mathematics requirement for an endorsement to teach mathematics in grades 6-8 in Illinois.

A minimum GPA of 2.25 in all courses counted for credit toward the minor numbered above MATH 201 is required.

*MATH 201 - Foundations of Elementary School Mathematics (3)
*MATH 229 - Calculus I (4)
MATH 302 - Introduction to Geometry (3)
MATH 402 - Methods of Instruction in the Mathematics Curriculum for Elementary School (3)
MATH 410 - Methods of Instruction in the Mathematics Curriculum for the Middle School (3)
STAT 301 - Elementary Statistics (4)
One of the following courses
*MATH 206 - Introductory Discrete Mathematics (3),
*MATH 210 - Finite Mathematics (3)
MATH 303 - Introduction to Number Theory (3),
MATH 304 - History of Mathematics Through the 17th Century (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Applied Probability and Statistics (21-22)

*MATH 229 - Calculus I (4)
MATH 230 - Calculus II (4)
MATH 232 - Calculus III (4)
Three of the following (9-10)
STAT 350 - Introduction to Probability and Statistics (3)
STAT 470 - Introduction to Probability Theory (3)
STAT 471 - Probability Models and Applications (3)
STAT 472 - Introduction to Mathematical Statistics (3)
STAT 473 - Statistical Methods and Models I (3)
STAT 473A - Statistical Computing Packages (1)
STAT 474 - Statistical Methods and Models II (3)
STAT 478 - Statistical Methods of Forecasting (3)

Six or more semester hours in the minor must be taken at NIU.

Certificate of Undergraduate Study

Actuarial Science (12)

This certificate is designed to provide preparatory study in actuarial science. Specifically, students completing the required course work can take the professional Exam I, which is jointly administered by the Society of Actuaries and the Casualty Actuarial Society. It is open to all undergraduates. Students must maintain good academic standing in the university, achieve a minimum grade of C in each certificate course, achieve a GPA of at least 3.00 in all certificate courses, and complete all certificate course work within six calendar years. With department approval, some or all of the certificate courses may be applied toward undergraduate degree requirements in the department.

* Available for general education credit.

Requirements
STAT 350 - Introduction to Probability and Statistics (3)
STAT 470 - Introduction to Probability Theory (3)
STAT 481 - Probabilistic Foundations in Actuarial Science (3)
ECON 260 - Principles of Microeconomics (3)

Course List

Mathematics (MATH)

101. CORE COMPETENCY IN MATHEMATICS (3). Mastery of elementary skills and facts, understanding of logically correct arguments, abstract thinking, and problem solving ability. Not intended as preparation for MATH 110 or for courses numbered above MATH 110. Not available for credit to students who have previously received credit with a grade of C or better in a MATH course numbered above 110 except MATH 201. Not open for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: Intermediate algebra and geometry.

108. FUNDAMENTALS OF MATHEMATICS I (3). Designed for and restricted to first-semester freshmen, specially admitted students. Does not count as credit for graduation.

109. FUNDAMENTALS OF MATHEMATICS II (3). Designed for and restricted to first-year, specially admitted students. May be used to continue MATH 108. Does not count as credit for graduation. Used as preparation for MATH 101, MATH 110, or MATH 201.

110. COLLEGE ALGEBRA (3). Algebraic and exponential functions, basic linear algebra. Requires skills and knowledge of intermediate algebra and plane geometry. Does not count for credit toward the major or minor in mathematical sciences. Not open for credit to students having credit in MATH 155 or MATH 211 or MATH 229. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: Satisfactory performance on the Mathematics Placement Examination.

155. TRIGONOMETRY AND ELEMENTARY FUNCTIONS (3). Polynomials and rational functions, review of exponential and logarithmic functions, trigonometry, and complex numbers. Does not count for credit toward the major or minor in mathematical sciences. Not open for credit to students who have obtained a grade of C or better in MATH 229. PRQ: MATH 110 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

201. FOUNDATIONS OF ELEMENTARY SCHOOL MATHEMATICS (3). Introduction to sets, geometry, measurement, logic, structure of mathematical systems, and the real number system. Open for credit only toward the majors in early childhood studies, elementary education, and special education. Does not count for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: One year of high school algebra and one year of high school geometry.

206. INTRODUCTORY DISCRETE MATHEMATICS (3). Introduction to sets, algorithms, induction, recursion, relations, graphs, trees, and algebraic structure, with applications, many of which are in computer science. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 110 or satisfactory performance on the Mathematics Placement Examination.

210. FINITE MATHEMATICS (3). Introduction to mathematical topics with applications to business, social science, and other fields. Includes such topics as functions and graphs, matrix algebra and solutions of systems of linear equations, inequalities and linear programming, elementary combinatorics, and probability. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: One year of high school algebra, one year of high school geometry, and satisfactory performance on the Mathematics Placement Examination or MATH 110 with a grade of C or better.

211. CALCULUS FOR BUSINESS AND SOCIAL SCIENCE (3). An elementary treatment of topics from differential and integral calculus, with applications in social science and business. Except with departmental approval students may not receive credit for both MATH 211 and MATH 229. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 110 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

229. CALCULUS I (4). A first course in calculus. Except with departmental approval, students may not receive credit for both MATH 211 and MATH 229. PRQ: MATH 155 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination.

230. CALCULUS II (4). Continuation of MATH 229. Techniques of integration and applications of integrals, transcendental functions, and applications of series. PRQ: MATH 229 with a grade of C or better.

232. CALCULUS III (4). Continuation of MATH 230. Multivariable and vector calculus. PRQ: MATH 230 with a grade of C or better.

240. LINEAR ALGEBRA AND APPLICATIONS (4). Matrix algebra and solutions of systems of linear equations, matrix inversion, determinants. Vector spaces, linear dependence, basis and dimension, subspaces. Inner products, Gram-Schmidt process. Linear transformations, matrices of a linear transformation. Eigenvalues and eigenvectors. Applications. Constructing and writing mathematical proofs. A transition between beginning calculus courses and upper-level mathematics courses. PRQ: MATH 232.

280. INTRODUCTION TO MATHEMATICAL REASONING (3). An introduction to the idea of mathematical proof. Emphasis on improving students' ability to construct, explain, and justify mathematical arguments. Assists in the transition from the calculus sequence to more abstract, proof-oriented courses. PRQ: MATH 230.

297. DIRECTED STUDY (1 to 3). Selected readings to supplement lower-division mathematical sciences courses. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

302. INTRODUCTION TO GEOMETRY (3). Basic concepts in plane and solid geometry, measurement, congruence and similarity, constructions, coordinate geometry, transformations and tessellations, topology, and selected topics. Not used in major or minor GPA calculations for mathematical sciences majors or minors. PRQ: MATH 229 or consent of department.

303. INTRODUCTION TO NUMBER THEORY (3). Problem solving, methods of proof, divisibility, primes, congruences, Diophantine equations, integer sequences, number-theoretic functions, and selected topics. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 229 or consent of department.

304. HISTORY OF MATHEMATICS THROUGH THE 17TH CENTURY (3). Mathematical developments from the ancients through the 17th century. Emphasis on the development of an interrelationship among special topics from arithmetic, algebra, geometry and calculus, across different cultures and through time. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 229 or consent of department.

334. FOUNDATIONS OF APPLIED MATHEMATICS (4). Solution techniques for ordinary differential equations. Topics include hyperbolic functions, Laplace transforms, Fourier series, partial differential equations, and special functions. Not open for credit to students who have received credit for MATH 336. PRQ: MATH 232

336. ORDINARY DIFFERENTIAL EQUATIONS (3). Rudiments of the theory of ordinary differential equations and techniques of solution. Applications. Not available for credit to students who have received credit for MATH 334. PRQ: MATH 230.

339. ENGINEERING MATHEMATICS I (3). Constrained extrema, Lagrange multipliers. Calculus of variations. Fourier series. Introduction to partial differential equations and integral transforms. Multiple integrals. Line and surface integrals. Vector analysis. Functions of a complex variable. Applications. PRQ: ELE 210, MEE 211, MATH 232, and MATH 336.

353. GEOMETRY (3). The study and development of geometric axiomatic systems. Topics selected from Hilbert's axioms for Euclidean geometry; projective, affine and Euclidean spaces over real vector spaces; convexity. Primarily intended for students preparing to teach mathematics. PRQ: MATH 240 or consent of department.

360. MODEL BUILDING IN APPLIED MATHEMATICS (3). An introduction to the formulation, analysis and interpretation of

mathematical models in the study of selected problems in the natural sciences, the social sciences, and management science. Not open for credit to students having credit in MATH or STAT courses numbered 420 or above, except by consent of department. PRQ: MATH 230.

380. ELEMENTARY COMBINATORICS (3). Permutations, combinations, generating functions, Dirichlet principle, Ramsey's theorem, principle of inclusion-exclusion. Graphs, trees, circuits, Latin squares. PRQ: MATH 230.

401. CLINICAL SECONDARY SCHOOL EXPERIENCE IN MATHEMATICS (1 to 2). A discipline-based clinical experience for students seeking initial secondary certification in mathematics. Includes observations, evaluation, methods, and problems practicum as a part of a minimum of 40 clock hours of supervised and formally evaluated experiences in the particular setting likely for the student teaching experience. S/U grading. PRQ: Consent of department.

402. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR ELEMENTARY SCHOOL (3). *Crosslisted as TLEE 402X*. Methods, techniques, materials, curricular issues, learning theories, and research utilized in the teaching of elementary school mathematics. Attention given to the teaching of exceptional students and to planning for multicultural learning situations. Intended for students in education. Accepted for credit as an elementary mathematics methods course, but not as an upper-division mathematical content course. Not open for credit toward the major or minor in mathematical sciences. Not used in major or minor GPA calculation for mathematical sciences majors or minors. PRQ: MATH 201 with a grade of C or better and junior standing or consent of department.

410. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR THE MIDDLE SCHOOL (3). Objectives, problems, strategies, and trends in teaching middle school and junior high school mathematics. Applications of learning theory and research focusing on remediation, presentation of new concepts, the needs of exceptional students, planning for multicultural settings, and the use of manipulatives. Accepted for credit as a middle school mathematics methods course, but not as an upper-division mathematical content course. Accepted as mathematical sciences credit only for those preparing to teach. Not used in major or minor GPA calculations for mathematical sciences majors or minors. PRQ: For those seeking or holding elementary education certification, MATH 229 and MATH 402; for those seeking or holding secondary education certification, MATH 229.

411. SECONDARY SCHOOL MATHEMATICS CLINICAL EXPERIENCE (0). Fifteen clock hours of pre-student teaching clinical experience. PRQ: Consent of department.

412. METHODS OF INSTRUCTION IN THE MATHEMATICS CURRICULUM FOR SECONDARY SCHOOL (3). Objectives and organization of the curriculum and instructional materials for mathematics programs for secondary school with attention to methods of instruction, the needs of exceptional students, reading techniques in mathematics, and planning for multicultural learning situations. Accepted for credit toward the major or minor only for those preparing to teach. Accepted for credit as a methods course for secondary school, but not as an upper-division mathematical content course. Not used in major or minor GPA calculation except for mathematics education majors and minors. CRQ: MATH 353 and consent of department.

413. STUDENT TEACHING (SECONDARY) IN MATHEMATICS (7 to 12). Student teaching for 10 weeks or for one semester. Assignments to be arranged with the Office of Teacher Certification in the College of Liberal Arts and Sciences after approval by the Department of Mathematical Sciences. Not available for credit in the major. See "Teacher Certification Requirements." PRQ: MATH 412 and consent of department.

415. USES OF TECHNOLOGY IN THE MATHEMATICS CURRICULUM FOR GRADES K-12 (3). Hands-on experiences working with current technology (scientific calculators, graphics calculators, computers, and computer software) for elementary, middle school, and secondary school mathematics. Presentation and evaluation of methods and strategies for employing technology as a regular part of instruction and assessment, including discussion of educational foundations. Accepted as mathematical sciences credit only for those preparing to teach. Not accepted for credit as an upper-division mathematical content course for certification purposes. Not used in major or minor GPA calculations. CRQ: MATH 402, MATH 410, or MATH 412.

416. TOPICS IN MATHEMATICS FOR TEACHERS (3). Selected topics in mathematical sciences. Intended primarily for students preparing to teach mathematics in the secondary school. Not used in major or minor GPA calculation except for emphasis 5 majors and option 3 minors. PRQ: MATH 240 and consent of department.

420. ALGEBRA I (3). Introduction to group theory. Properties of the integers, functions, and equivalence relations. A concrete approach to cyclic groups and permutation groups; isomorphisms and the theorems of Lagrange and Cayley. PRQ: MATH 240.

421. ALGEBRA II (3). Continuation of MATH 420. Homomorphisms and factor groups; introduction to commutative rings, with emphasis on polynomial rings; and fields, and algebraic extensions. Applications to classical geometric problems. PRQ: MATH 420.

423. LINEAR AND MULTILINEAR ALGEBRA (3). General theory of vector spaces, linear transformations, and matrices. Topics selected from determinants, tensor products, canonical forms, and bilinear and quadratic forms. PRQ: MATH 240 and MATH 420, or consent of department.

430. ADVANCED CALCULUS I (3). Re-examination of the calculus of functions of one variable: convergence, continuity, differentiation, the mean-value theorem, and the Riemann integral. PRQ: MATH 232 and MATH 240, or MATH 334.

431. ADVANCED CALCULUS II (3). Further study of sequences and series of functions; functions of several variables. PRQ: MATH 430.

432. ADVANCED CALCULUS III (3). Line and surface integrals, the Riemann-Stieltjes integral, gamma and beta functions, and Fourier series and integrals. Applications to probability theory and mathematical physics. PRQ: MATH 431 or both MATH 334 and PHYS 385.

434. NUMERICAL LINEAR ALGEBRA (3). *Crosslisted as CSCI 434X*. Roundoff errors and computer arithmetic. Direct and iterative methods for solving linear systems; norms and condition numbers, iterative refinement. Linear least squares problems: the normal equations and QR approach for overdetermined systems. Numerical methods for eigenvalues: an introduction to the QR iteration. Extensive use of computers. PRQ: MATH 232, MATH 240, and CSCI 230, CSCI 240, or approved equivalent.

435. NUMERICAL ANALYSIS (3). *Crosslisted as CSCI 435X*. Polynomial interpolation, numerical solutions of nonlinear equations, least squares approximation by polynomials, orthogonal polynomials, economization of power series. Numerical integration including quadrature formulae, adaptive quadrature, composite quadrature formulae, and Romberg integration. Numerical methods for initial value problems including Taylor series methods, Runge-Kutta methods, and multistep methods. Extensive use of computers. PRQ: MATH 232, MATH 240, and CSCI 230, CSCI 240, or approved equivalent.

438. THEORY OF DIFFERENTIAL EQUATIONS (3). Topics include linear systems, existence and uniqueness of solutions, nonlinear equations, and stability. PRQ: MATH 232, MATH 240, and either MATH 334 or MATH 336, or consent of department.

439. ENGINEERING MATHEMATICS II (3). Green's functions and integral transform solutions of partial differential equations. Coordinate transformations and tensor analysis. Gamma, beta and error functions. Elliptic functions. Asymptotic series. Series solutions of ordinary and partial differential equations. Orthogonal expansions. Probability. Numerical methods. PRQ: MATH 339 with a grade of C or better.

440. ELEMENTS OF COMPLEX ANALYSIS (3). Beginning course in complex analysis emphasizing the applications of complex function theory. PRQ: MATH 232 and MATH 240, or MATH 334, or equivalent.

442. ELEMENTS OF PARTIAL DIFFERENTIAL EQUATIONS (3). Introduction to partial differential equations emphasizing constructive methods of solution for the wave equation, heat equation, and the Laplace and Poisson equations. Separation of variables, Fourier series, Fourier integral, method of characteristics, maximum principles, Green's functions, eigenfunction expansions, and the Laplace and

Fourier transforms. PRQ: Either MATH 334, or MATH 232 and MATH 336.

444. LINEAR PROGRAMMING AND NETWORK FLOWS (3). Introduction to linear programming, network flows, and applications. PRQ: MATH 240 or consent of department.

450. INTRODUCTION TO TOPOLOGY (3). Basic notions of metric and topological spaces; additional topics from combinatorial and algebraic topology may be included. PRQ: MATH 430.

456. LINEAR GEOMETRY (3). Treatment of affine and related geometries using the techniques of linear algebra. PRQ: MATH 420.

460. MODELING DYNAMICAL SYSTEMS (3). Involves students in the process of translating some questions about the observed world into mathematical form, combining formal reasoning with intuitive insights. Phenomena susceptible to formulation in terms of difference equations and various kinds of differential equations are investigated. Concepts of equilibrium, stability, bifurcation, limit cycles, and chaos illustrated. PRQ: MATH 232, MATH 240, MATH 336, PHYS 253, and PHYS 273, or consent of department.

480. NUMBER THEORY (3). Divisibility, primes, congruences, quadratic reciprocity, Diophantine equations, continued fractions, and selected topics. PRQ: MATH 420 or consent of department.

490X. TOPICS IN COMPUTER SCIENCE (3). *Crosslisted as CSCI 490.*
A. Algorithms
C. Automata,Computability, and Formal Languages
Selected topics from major areas in computer science. May be repeated when subject varies. PRQ: Senior standing and consent of department.

492. SCHOOL MATHEMATICS (1 to 6).
A. Elementary School
B. Junior High-Middle School
C. Secondary School
Intensive study of selected mathematical topics in curriculum and instruction as they relate to the teaching of mathematics. Not open for credit toward the major or minor in mathematical sciences. Course may be repeated to a maximum of 12 semester hours as topic changes. PRQ: Consent of department.

496. SEMINAR IN COMPUTATIONAL MATHEMATICS (3). Builds on the required courses in the computational mathematics emphasis to give the student in-depth experience doing projects. PRQ: Consent of department.

497. UNDERGRADUATE READINGS IN MATHEMATICS (1 to 3). Selected readings from mathematical literature. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Statistics (STAT)

208. BASIC STATISTICS (3). Designed to provide students with an understanding of reasoning involved in the statistician's approach to a variety of problems. Not open for credit toward the major or minor in mathematical sciences. Not open for credit to students with credit in an upper-division statistics course or in OMIS 324 or UBUS 223. Not used in major or minor GPA calculation for mathematical sciences majors or minors.

301. ELEMENTARY STATISTICS (4). Introduction to basic concepts in statistical methods including probability, theoretical and empirical distributions, estimation, tests of hypotheses, linear regression and correlation, and single classification analysis of variance procedures. Not available for credit toward the major in mathematical sciences. Not used in major GPA calculation for mathematical sciences majors. PRQ: MATH 206 or MATH 210 or MATH 211 or MATH 229.

350. INTRODUCTION TO PROBABILITY AND STATISTICS (3). Introduction to the basic ideas and fundamental laws of probability including sample spaces, events, independence, random variables, special probability distributions and elementary statistical inference. PRQ: MATH 230.

470. INTRODUCTION TO PROBABILITY THEORY (3). Includes probability spaces, random variables, discrete, continuous, mixed probability distributions, moment generating functions, multivariate distributions, conditional probability, conditional expectation, special distributions, laws of large numbers, and central limit theorem. PRQ: MATH 232 and MATH 240, or consent of division.

471. PROBABILITY MODELS AND APPLICATIONS (3). Introduction to elementary stochastic processes and their applications to various phenomena in engineering, management science, the physical and social sciences, and operations research. PRQ: STAT 470.

472. INTRODUCTION TO MATHEMATICAL STATISTICS (3). Includes distributions of functions of random variables, interval estimation, sufficiency, completeness, point estimation, statistical hypotheses, analysis of variance, and the multivariate normal distribution. PRQ: STAT 470.

473. STATISTICAL METHODS AND MODELS I (3). A first course in statistical methods and models including exploratory data analysis and graphical techniques, regression analysis, experimental design and basic sampling techniques. Extensive use of statistical computer packages. PRQ: MATH 211 and STAT 301, or STAT 350, or consent of division. CRQ: STAT 473A.

473A. STATISTICAL COMPUTING PACKAGES (1). Introduction to statistical computing with the aid of software packages. Data entry, transformations, simple plots, summary statistics, and statistical procedures. No previous computer experience is required. PRQ: MATH 211 and STAT 301, or STAT 350, or consent of division. CRQ: STAT 473 or consent of division.

474. STATISTICAL METHODS AND MODELS II (3). Continuation of STAT 473. Topics include factorial experiments: interactions, nested models, and randomized block designs. Categorical response data analysis: ordinal data, measures of association, Cochran-Mantel-Haenszel Test, logistic regression, and measures of agreement. PRQ: STAT 473 and STAT 473A, or consent of division.

478. STATISTICAL METHODS OF FORECASTING (3). Introduction to forecasting including use of regression in forecasting; removal and estimation of trend and seasonality; exponential smoothing; stochastic time series models; stochastic difference equations; autoregressive, moving average, and mixed models; model identification and estimation; diagnostic checking; and the use of time series models in forecasting. PRQ: STAT 473 or consent of division.

481. PROBABILISTIC FOUNDATIONS IN ACTUARIAL SCIENCE (3). Actuarial populations. Univariate parametric actuarial distributions including Weibull and Pareto. Multivariate actuarial distributions. Exact and asymptotic relationships among these distributions. Mixtures of distributions. Jointly discrete, continuous, and mixed distributions. Moment, cumulant, and probability generating functions. Transformations of variables for multivariate distributions. Basic theory of individual and collective risk models for aggregate loss from insurance policies. PRQ: STAT 470 or consent of division.

493. SPECIAL TOPICS IN STATISTICS (1 to 3). Discussion and study of readings on topics of special interest to undergraduate statistics/probability students. May be repeated to a maximum of 6 semester hours. PRQ: Consent of division.

Mathematical Sciences Faculty

William D. Blair, Ph.D., University of Maryland, Presidential Teaching Professor, chair
John Wolfskill, Ph.D., California Institute of Technology, associate professor, assistant chair
Gregory Ammar, Ph.D., Case Western Reserve University, professor
Rodney Angotti, Ph.D., University of Pittsburgh, associate professor
Gerard Awanou, Ph.D., University of Georgia, assistant professor
Sanjib Basu, Ph.D., Purdue University, associate professor
John A. Beachy, Ph.D., Indiana University, Distinguished Teaching Professor
Hamid Bellout, Ph.D., Purdue University, professor
Harvey I. Blau, Ph.D., Yale University, professor
Richard Blecksmith, Ph.D., University of Arizona, professor
Frederick Bloom, Ph.D., Cornell University, Presidential Research Professor

Douglas Bowman, Ph.D., University of California, Los Angeles, associate professor
Biswa N. Datta, Ph.D., University of Ottawa, Distinguished Research Professor
Karabi Datta, Ph.D., University of Campinas, Brazil, associate professor
Sien Deng, Ph.D., University of Washington, associate professor
Nader Ebrahimi, Ph.D., Iowa State University, professor
Harald E. Ellers, Ph.D., University of Illinois, associate professor
John A. Ewell, Ph.D., University of California, Los Angeles, adjunct professor
Daniel Grubb, Ph.D., Kansas State University, associate professor
Sudhir Gupta, Ph.D., University of Kent, professor
Bernard Harris, Ph.D., University of Wales, professor
Ellen Hines, Ed.D., Northern Illinois University, associate professor
Kitty L. Holland, Ph.D., University of Illinois, Chicago, associate professor
Yoo Pyo Hong, Ph.D., Johns Hopkins University, associate professor
Balakrishna Hosmane, Ph.D., University of Kentucky, associate professor
Hui Hu, Ph.D., Stanford University, associate professor
Donghoon Hyeon, Ph.D., University of Illinois, assistant professor
Helen A. Khoury, Ph.D., Florida State University, associate professor
Qingkai Kong, Ph.D., University of Alberta, professor
Ying C. Kwong, Ph.D., University of Wisconsin, Madison, associate professor
Rama T. Lingham, Ph.D., Purdue University, associate professor, director, Division of Statistics
Anders Linnér, Ph.D., Case Western Reserve University, associate professor
Donald B. McAlister, Ph.D., Queen's University (Belfast), adjunct professor
Thomas W. O'Gorman, Ph.D., University of Iowa, associate professor
Ching-Tsuan Pan, Ph.D., North Carolina State University, associate professor
Alan Polansky, Ph.D., Southern Methodist University, associate professor
Mohsen Pourahmadi, Ph.D., Michigan State University, professor
David Rusin, Ph.D., University of Chicago, associate professor
Mary Shafer, Ph.D., University of Wisconsin, assistant professor
Gleb Sirotkin, Ph.D., Indiana University/Purdue University, Indianapolis, assistant professor
Linda R. Sons, Ph.D., Cornell University, Distinguished Teaching Professor
Diana Steele, Ph.D., University of Florida, associate professor
Joseph B. Stephen, Ph.D., University of Nebraska, Lincoln, associate professor
Jeffrey L. Thunder, Ph.D., University of Colorado, professor
Stanley M. Trail, Ph.D., Oklahoma State University, adjunct professor
Peter Waterman, Ph.D., University of Aberdeen, associate professor
Hongyou Wu, Ph.D., University of Kansas, professor
Zhuan Ye, Ph.D., Purdue University, professor
Anton Zettl, Ph.D., University of Tennessee, Distinguished Research Professor
Alan Zollman, Ph.D., Indiana University, associate professor

Department of Philosophy (PHIL)

The Department of Philosophy offers a major leading to the B.A. degree. Philosophy is the attempt to think critically about the nature of the world and of knowledge, to inquire about the significance of life, and to identify worthwhile goals for individuals and society. Philosophers also inquire into reasons why one point of view is preferable to another. This leads them to consider standards by which reasons may be appraised.

Several departmental courses can be used toward fulfilling the humanities and the arts area and the interdisciplinary studies area requirements in the university's general education program.

Major in Philosophy (B.A.)

Not more than 9 semester hours of 100- and 200-level course work in philosophy will count toward the major.

Requirements in Department (33)

PHIL 205 - Symbolic Logic (3),
OR PHIL 405 - Intermediate Logic (3)
PHIL 321 - History of Philosophy: Ancient (3)
PHIL 322 - History of Philosophy: Renaissance and Modern (3)
Electives in philosophy (12)
One course from each of the following four fields (12)

19th or 20th century history of philosophy

PHIL 420B - Topics in the History of Philosophy: 19th and 20th Century History of Philosophy (3)
PHIL 427 - 19th Century Philosophy (3)
PHIL 428 - 20th Century Phenomenological Philosophies (3)
PHIL 429 - 20th Century Analytic Philosophies (3)
PHIL 482 - Classical American Philosophers (3)

Ethics and value theory

PHIL 331 - Classical Ethical Theories (3)
PHIL 430T - Topics in Ethics (3)
PHIL 431 - Contemporary Ethical Theory (3)
PHIL 442 - Theories of Value (3)

Metaphysics or epistemology

PHIL 311 - Problems of Knowledge (3)
PHIL 312 - Theories and Problems of Reality (3)
PHIL 410 - Topics in Metaphysics or Epistemology (3)
PHIL 411 - Theories and Problems of Knowledge (3)
PHIL 412 - Metaphysics (3)

Major figures in philosophy

PHIL 420A - Topics in the History of Philosophy: Major Philosophers (3)
PHIL 421 - Plato (3)
PHIL 422 - Aristotle (3)
PHIL 426 - Kant (3)

Requirements outside Department (0-12)

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Total Hours for a Major in Philosophy: 33-45

Degree with Honors

Admission to the departmental honors program requires the approval of the department chair, and will be available only to juniors or seniors who have a GPA of at least 3.25 in all course work and of 3.40 or above in philosophy courses.

Accepted candidates must complete the normal requirements for the philosophy major and an honors thesis under PHIL 491H for 2-4 semester hours. The senior honors thesis must be approved, and the grade for PHIL 491H must be assigned by the supervising instructor. The H designation for Honors must then be approved by a committee consisting of the supervising instructor, the undergraduate faculty adviser, and the chair of the department.

Minor in Philosophy (18)

Electives from 300- or 400-level courses (9)
Electives from any philosophy courses (9)

Six or more semester hours in the minor must be taken at NIU.

Course List

101. INTRODUCTION TO PHILOSOPHY (3). Reading and discussion of several major philosophical issues. These may include the possibility and limits of human knowledge, the meaning of human existence, the nature of morality, the existence of God, and the significance of religious experience. Analysis of original works of such philosophers as Plato, Aristotle, Descartes, Hume, Kant, Mill, and Sartre. Emphasis on understanding philosophical theories and using the techniques of philosophical reasoning.

102. INTRODUCTION TO PHILOSOPHY: PROBLEMS OF MORALITY, ART, AND RELIGION (3). Reading and discussion of classical and modern theories of the moral life, social responsibility, and artistic and religious experience. Analysis of the original works of such philosophers as Aristotle, Kant, Mill, Santayana, and William James. Emphasis on understanding theories of human values and using the techniques of evaluation reasoning.

105. CRITICAL REASONING (3). Introduction to basic principles of rational argument evaluation in everyday life. Topics may include deductive reasoning, informal fallacies, statistical and probabilistic reasoning, causal inference, rational decision making, scientific reasoning, and the nature of evidence and proof. Emphasis on sharpening students' abilities to evaluate arguments. Students may not receive credit for both PHIL 103 and PHIL 105.

170. WORLD RELIGIONS (3). Survey of the philosophical and theological foundations of the major religions of the world. Consideration of such religions as Christianity, Judaism, Buddhism, Taoism, Islam, and Hinduism in the light of their own religious writings as well as critical and comparative examinations of their meaning and significance.

205. SYMBOLIC LOGIC (3). Introduction to formal logic, including propositional and quantificational logic. Emphasis on formal and semantic proof techniques and their applications to deductive reasoning in natural language. Students may not receive credit for both PHIL 205 and PHIL 302.

231. CONTEMPORARY MORAL ISSUES (3). Consideration of a number of major moral issues such as abortion, animal ethics, capital punishment, civil disobedience, economic justice, environmental ethics, euthanasia, human rights, nationalism, racial or sexual discrimination, sexual conduct, terrorism, and war.

282. PHILOSOPHY OF MYTH AND SYMBOLISM (3). Discussion of mythical thought as a form of human consciousness and problems of the relationship of symbols to the world. Consideration of such problems as the origin of language in myth and ritual, types of symbolism, logical structure of metaphor, and the role of mythical and literary symbolism in human knowledge and society.

311. PROBLEMS OF KNOWLEDGE (3). Study of the major issues involved in the search for truth. Topics include perception, memory, meaning, belief, evidence, and truth.

312. THEORIES AND PROBLEMS OF REALITY (3). Study of various classical and contemporary views of the nature and structure of reality. Consideration of such topics as time, space, causation, freedom, matter, mind, and self. Emphasis on either analyzing traditional philosophical systems or tracing a problem through the thought of several philosophers.

321. HISTORY OF PHILOSOPHY: ANCIENT (3). Study and criticism of selected works of major ancient Greek and Roman philosophers with attention given to the pre-Socratics, Socrates, Plato, and Aristotle, and to the major schools of the Hellenistic period.

322. HISTORY OF PHILOSOPHY: RENAISSANCE AND MODERN (3). Study and criticism of the works of major philosophers from the 15th to the 19th century using the writings of such philosophers as Bruno, Descartes, Spinoza, Hume, Rousseau, Kant, and Hegel.

331. CLASSICAL ETHICAL THEORIES (3). Examination of the major theories of morality. Analysis of the ethical theories of such philosophers as Plato, Hume, and Kant, and such ethical positions as hedonism, stoicism, and utilitarianism.

335. ENVIRONMENTAL ETHICS (3). Investigation of moral issues involving the environment. Topics may include the nature and extent of our duties regarding the environment, conservationism vs. preservationism, duties to future generations, biocentric ethics, ecofeminism, ethical individualism vs. ethical holism, the value of ecosystems, the moral status of animals, and animal experimentation.

336. BIOMEDICAL ETHICS (3). Examination of moral problems which arise in the context of health care practice and research. Consideration of both issues of individual conduct and public policy. May include discussion of general problems in ethical theory which have a direct bearing on these specific issues.

337. BUSINESS ETHICS (3). Consideration of moral problems arising in business as well as both issues of individual conduct and public policy. May include discussion of general problems in ethical theory which have a direct bearing on these specific issues.

341. PHILOSOPHY OF MIND (3). Survey of traditional and contemporary philosophical problems concerning the mind and the cognitive sciences. Topics may include the mind-body problem, the problem of other minds, personal identity, intentionality, mental causation, consciousness and self-awareness, reductionism, the possibility of artificial intelligence, and the nature of psychological explanation. Designed for students interested in psychology and cognitive science as well as for students interested in problems in the philosophy of mind.

342. PHILOSOPHY OF THE ARTS (3). Critical study of theories of art and related problems. Consideration of such topics as the structure of aesthetic experience, the meaning of works of art, the forms and elements of expression in the various arts, and the principles of art and literary criticism.

352. PHILOSOPHY OF SCIENCE (3). Study of the central philosophical problems raised by science, such as those concerning the nature of explanation, concept formation, realism and instrumentalism, and the nature of scientific progress. Designed for students interested in the sciences as well as for students interested in problems in the philosophy of science.

361. SOCIAL AND POLITICAL PHILOSOPHY (3). Examination of the nature and justification of social practices and political institutions. Topics may include the philosophical bases of democracy and alternative political systems; social justice and political autonomy in an age of globalization; war and terrorism; and variants of multiculturalism, environmentalism, communitarianism, and fundamentalism.

362. PHILOSOPHY OF LAW (3). Study of the philosophical problems created by law. Typical problems include the relevance of custom to law, the logical structure of legal systems, the justification of law, natural law and social justice, and the relationship between international law and lesser bodies of law. Designed to be of interest to students in political and social science.

364. PHILOSOPHICAL IDEAS IN LITERATURE (3). Relationships between literature and philosophy, accompanied by analysis of selected classics of world literature having philosophical importance. Emphasis on the various means whereby philosophical ideas are embodied in literary compositions.

365. FEMINISM AND PHILOSOPHY (3). Examination of feminist critiques of traditional philosophical problems, methods, and theories, and critical examination of the philosophical foundations of various feminist theories.

370. PHILOSOPHY OF RELIGION (3). Critical examination of the various aspects of religious experience and of related theological concepts and theories. Discussion of such topics as the relationship between myth and religion, the structure of worship, the significance of God's existence, and the relevance of modern science to religious belief.

381. INDIAN PHILOSOPHY (3). General survey of the philosophical tradition of India through the critical study of major Indian classics in English translation. Attention given to important works such as the Vedas, the Upanishads, the Bhagavad-Gita, and the teachings of the Buddha.

382. CHINESE PHILOSOPHY (3). General survey of the philosophical tradition of China through the critical study of major Chinese classics in English translation. Attention given to important works such as the Confucian *Analects*, the *Tao Te Ching* of Lao Tzu, the literature of Zen, and the major texts of neo-Confucianism.

390. CONTEMPORARY TOPICS IN PHILOSOPHY (3). Philosophical dimensions of selected current topics studied in a variety of settings. Topics vary and may include science fiction and philosophy, philosophical aspects of emerging technologies, bio-ethics, and business ethics. May be repeated to a maximum of 6 semester hours.

402. PHILOSOPHY OF LOGIC (3). Consideration of the various definitions of logic and theories of its role in mathematics, natural science, and philosophy with texts selected from such philosophers as Aristotle, Hegel, Mill, Peirce, Bradley, Dewey, and Strawson. PRQ: PHIL 205 or consent of department.

403. PHILOSOPHY OF MATHEMATICS (3). Problems in the interpretation of mathematics, e.g., the philosophical importance of non-Euclidean geometries, the arithmetization of analysis, Godel's incompleteness theorem, and such general philosophies of mathematics as formalism, intuitionism, and logicism. Readings from such philosophers as Kant, Frege, Russell, Poincare, and Quine. PRQ: 6 semester hours of philosophy at 300 level or consent of department.

404. PHILOSOPHY OF LANGUAGE (3). Study of philosophical problems concerning language, including issues of syntax, semantics, pragmatics, and hermeneutics. Topics include meaning, reference, logical form, modalities, tenses, metaphor, indexical terms, indirect discourse, anaphora, theories of truth, and semantic paradoxes.

405. INTERMEDIATE LOGIC (3). Review of symbolic logic including propositional logic, quantification theory, relations, and identity. Additional topics in formal logic and the philosophy of logic selected by the instructor such as proof theory, modal logic, theory of types, formal semantics and the relation between the formal and the informal understanding of validity. PRQ: PHIL 205 or consent of department.

410. TOPICS IN METAPHYSICS OR EPISTEMOLOGY (3). Intensive study of a major theory or issue in metaphysics or epistemology. May be repeated to a maximum of 6 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 3 semester hours of philosophy at the 300 level and consent of department.

411. THEORIES AND PROBLEMS OF KNOWLEDGE (3). Study of various contemporary views of knowledge. Consideration of such problems as the conditions of meaning; the nature of truth; the relationship between sensation, perception, and intuition; the difference between knowing and believing; and methods of verification and types of judgment. Analysis of the works of such philosophers as Meinong, Husserl, Brentano, Russell, Lewis, Wittgenstein, and Austin. Emphasis on either analyzing several theories of knowledge or tracing a problem through the thought of several philosophers. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

412. METAPHYSICS (3). Study of contemporary speculative and descriptive metaphysical theories dealing with such areas as cosmology and ontology. Critical exegesis of the writings of philosophers such as Whitehead, Bergson, Goodman, Sartre, and Strawson. PRQ: 6 semester hours of philosophy at the 300 level.

420. TOPICS IN THE HISTORY OF PHILOSOPHY (3).
A. Major Philosophers
B. 19th and 20th Century History of Philosphy
C. Philosophical Movements
Each topic may be repeated to a maximum of 6 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 3 semester hours of philosophy at the 300 level and consent of department.

421. PLATO (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

422. ARISTOTLE (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

423. MEDIEVAL PHILOSOPHY (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 321 or consent of department.

424. 17TH AND 18TH CENTURY EMPIRICIST PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Hobbes, Locke, Berkeley, Hume, and Reid. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

425. 17TH AND 18TH CENTURY RATIONALIST PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Descartes, Malebranche, Spinoza, Leibniz, and Wolff. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

426. KANT (3). PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

427. 19TH CENTURY PHILOSOPHY (3). A critical exegesis of selected writings representative of significant philosophical developments in 19th century thought with emphasis on post-Kantian idealism. Texts chosen from the writings of such philosophers as Hegel, Schopenhauer, Kierkegaard, Comte, J. S. Mill, Nietzsche, and Mach. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

428. 20TH CENTURY PHENOMENOLOGICAL PHILOSOPHIES (3). A critical exegesis of selected writings by such phenomenological philosophers as Husserl, Heidegger, Sarte, Merleau-Ponty, Ricoeur, Levinas, and Derrida. Examination of the phenomenological method and its relation to scientific, structuralist, hermeneutic and/or literary-deconstructive methods. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

429. 20TH CENTURY ANALYTIC PHILOSOPHIES (3). A critical exegesis of selected writings by such philosophers as Moore, Russell, Wittgenstein, Carnap, C. I. Lewis, Ryle, and Austin. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

430T. TOPICS IN ETHICS (3). Intensive study of a major theory, issue, or movement in historical or contemporary ethics. May be repeated to a maximum of 6 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 3 semester hours of philosophy at the 300 level and consent of department.

431. CONTEMPORARY ETHICAL THEORY (3). Study of the major problems and theories under discussion by specialists in ethical theory. Emphasis on meta-ethical problems and the analysis of ethical concepts. Readings selected from such philosophers as Toulmin, Nowell-Smith, Baier, Hare, and Rawls. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

442. THEORIES OF VALUE (3). Study of the major theories of value experience, evaluation, and the language of value. Analysis of the works of major theorists such as Dewey, Croce, C. I. Lewis, Perry, and Stevenson, as well as recent articles in the field. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

452. CONTEMPORARY PHILOSOPHY OF SCIENCE (3). Analysis of the recent literature dealing with the structure and methods of science. Issues centering around topics such as induction, description, concept formation and verification discussed in terms of the works of such philosophers as Hanson, Margenau, Hempel, Nagel, and Toulmin. PRQ: 9 semester hours of philosophy, including 6 semester hours of philosophy at the 300 level or consent of department.

462. PHILOSOPHY OF CULTURE (3). Various philosophical theories of culture and the areas of cultural life such as myth, religion, language, art, history, and sciences. Consideration of the works of such philosophers as Collingwood, Cassirer, Dewey, Whitehead, and Ortega y Gasset. Emphasis on the relevance of an analysis of culture for philosophical understanding. Designed to be of interest to advanced students in the humanities. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

471. CLASSICAL THEORIES IN THE PHILOSOPHY OF RELIGION (3). Analysis of some of the views which have achieved major importance in this field. Texts selected from such key works as Hume's *Dialogues Concerning Natural Religion,* Kant's *Religion Within the Limits of Reason Alone,* Schleiermacher's *On Religion,* and Feuerbach's *Essence of Christianity*. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

482. CLASSICAL AMERICAN PHILOSOPHERS (3). Analysis of some of the major figures in American thought from the colonial period through the 20th century. Selections from the works of such philosophers as Edwards, Emerson, Royce, Peirce, Dewey, Santayana, and Cohen. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

490. SEMINAR IN PHILOSOPHY (3). Intensive study of one major problem or position in historical or contemporary philosophy. May be repeated to a maximum of 9 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level and consent of department.

491. DIRECTED READINGS (1 to 4). Enrollment contingent on a student's proposed course of study and the approval of it by the faculty member selected to supervise the student's reading. May be repeated to a maximum of 9 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: Consent of department.

Philosophy Faculty

David J. Buller, Ph.D., Northwestern University, professor, chair
Michael Bishop, Ph.D., University of California, San Diego, associate professor
Mylan Engel, Jr., Ph.D., University of Arizona, associate professor
Alicia Finch, Ph.D., University of Notre Dame, assistant professor
Charles M. Gelven, Ph.D., Washington University, Distinguished Research Professor
James L. Hudson, Ph.D., Johns Hopkins University, associate professor
Tomis Kapitan, Ph.D., Indiana University, professor
Jennifer Lackey, Ph.D., Brown University, assistant professor
Baron Reed, Ph.D., Brown University, assistant professor
Sharon Sytsma, Ph.D., Loyola University, associate professor
William Tolhurst, Ph.D., University of Connecticut, associate professor

Department of Physics (PHYS)

The Department of Physics offers the B.S. degree in physics with three emphases. Physics majors should complete at least one year of a foreign language and consult with the department chair before choosing one of the three emphases below.

The department also offers a minor in physics, which is attractive to other science and mathematics majors as well as to students in technical programs. Several of the lower-division courses offered by the department can be used by non-majors toward fulfilling the science area requirement in the university's general education program. Certain courses are also required in majors in other departments. In addition, the department also offers astronomy courses. Illinois state teacher certification is available through the physics teacher certification program.

Students who want to choose the emphasis in secondary teaching should consult with the physics department education adviser. Applicants are admitted to this emphasis upon completion of a successful interview. Students pursuing the emphasis in secondary teaching need to enter the physics teacher certification program only if they also wish to become certified to teach within the state of Illinois. Students seeking a degree in physics who also wish to become certified to teach must see the physics department adviser at the earliest possible date. Failure to do so may make it impossible for the student to satisfy NIU and physics department graduation requirements as well as Illinois certification requirements in four years.

The department provides academic advisement to incoming preengineering students who plan to transfer to another university after a few years at NIU. The department offers two courses of study to prepare students for the study of engineering at other universities. The first is a two-year pre-professional course of study in science and mathematics which can be tailored to the prerequisites of specific engineering programs. The second requires approximately three years at NIU and two years at the University of Illinois and leads to a B.S. degree in physics from Northern Illinois University and an engineering degree from the University of Illinois. (See "Pre-professional Studies.")

Major in Physics (B.S.)

Emphasis 1. Professional Physics for Graduate Study

Requirements in Department (45-50)

PHYS 210 and PHYS 211 - General Physics I and II (8), and
  PHYS 252 - Intermediate General Physics (3),
  OR PHYS 253 - Fundamentals of Physics I: Mechanics, and PHYS 273 - Fundamentals of Physics II: Electromagnetism (8)
PHYS 283 - Fundamentals of Physics III: Quantum Physics (3)
PHYS 284 - Quantum Physics Laboratory (1)
PHYS 300 - Analytical Mechanics I (3)
PHYS 320 - Thermodynamics and Statistical Physics (3)
PHYS 370 - Electricity and Magnetism I (3)
PHYS 374 - Introduction to Experimental Physics (3)
PHYS 375 - Laboratory Electronics I (4)
PHYS 430 - Optics (4),
  OR PHYS 475 - Laboratory Electronics II (4)
PHYS 460 - Quantum Physics (3)
PHYS 461 - Modern Physics (3)
PHYS 498 - Senior Seminar (1),
  OR PHYS 499H - Senior Project in Physics (3)
Two of the following[1] (6)
  PHYS 367 - Waves and Vibrations (3)
  PHYS 400[1] - Analytical Mechanics II (3)
  PHYS 463 - Thermodynamics, Kinetic Theory, and Statistical Mechanics (3)
  PHYS 470[1] - Electricity and Magnetism II (3)
  PHYS 485 - Methods of Mathematical Physics II (3)

Requirements outside Department (23)

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
*MATH 229 and MATH 230 and MATH 232 - Calculus I, II, and III (12)
MATH 336 - Ordinary Differential Equations (3)

Total Hours for Emphasis 1, Professional Physics for Graduate Study: 68-73

Emphasis 2. Secondary School Teaching

Students interested in Illinois State certification as a physics teacher should see the section below on teacher certification.

Requirements in Department (37-42)

PHYS 210 and PHYS 211 - General Physics I and II (8), and
  PHYS 252 - Intermediate General Physics (3),
  OR PHYS 253 - Fundamentals of Physics I: Mechanics, and PHYS 273 - Fundamentals of Physics II: Electromagnetism (8)
PHYS 283 - Fundamentals of Physics III: Quantum Physics (3)
PHYS 284 - Quantum Physics Laboratory (1)
PHYS 300 - Analytical Mechanics I (3)
PHYS 320 - Thermodynamics and Statistical Physics (3)
PHYS 367 - Waves and Vibrations (3)
PHYS 370 - Electricity and Magnetism I (3)
PHYS 374 - Introduction to Experimental Physics (3)
PHYS 375 - Laboratory Electronics I (4)
PHYS 494 - Use of Technology in Secondary Science Teaching (2)
PHYS 495 - Teaching of Physical Sciences (3)
PHYS 498 - Senior Seminar (1),
  OR PHYS 499H - Senior Project in Physics (3)

Requirements outside Department (21-22)

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
ILAS 300 - Discipline-Based Clinical Experiences for the Illinois Standard High School Certificate (1),
  OR ILAS 301 - Second Clinical Experience (1-2)
*MATH 229 and MATH 230 and MATH 232 - Calculus I, II, and III (12)

Total Hours for Emphasis 2, Secondary School Teaching: 58-64

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* Available for general education credit
[1]PHYS 400 and PHYS 470 are recommended for students intending to enter graduate school in physics.

Emphasis 3. Applied Physics

Requirements in Department (29-34)

PHYS 210 and PHYS 211 - General Physics I and II (8), and PHYS 252 - Intermediate General Physics (3),
OR PHYS 253 - Fundamentals of Physics I: Mechanics, and PHYS 273 - Fundamentals of Physics II: Electromagnetism (8)
PHYS 283 - Fundamentals of Physics III: Quantum Physics (3)
PHYS 284 - Quantum Physics Laboratory (1)
PHYS 300 - Analytical Mechanics I (3)
PHYS 320 - Thermodynamics and Statistical Physics (3)
PHYS 370 - Electricity and Magnetism I (3)
PHYS 374 - Introduction to Experimental Physics (3)
PHYS 375 - Laboratory Electronics I (4)
PHYS 498 - Senior Seminar (1),
OR PHYS 499H - Senior Project in Physics (3)

Requirements outside Department (23)

*CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
*MATH 229 and MATH 230 and MATH 232 - Calculus I, II, and III (12)
MATH 336 - Ordinary Differential Equations (3)

Other Requirements (17-19)

Electives from physics and other related sciences. At least 10 semester hours must be 300- or 400-level PHYS courses. Students should consult with a departmental adviser for assistance in selecting the appropriate sequence of courses to constitute a track of study in one of the following areas of applied physics: acoustics, computational physics, geophysics and astronomy, health physics, or materials physics. List of courses appropriate to each of the above tracks are available in the departmental office, the department undergraduate Web site, and from departmental advisers. Other tracks can be developed in consultation with an adviser.

Total Hours for Emphasis 3, Applied Physics: 69-76

Teacher Certification

Individuals wishing to receive certification and/or endorsement to teach physics or general science with a physics emphasis should apply for admission to the physics teacher certification program. Admission to teacher certification in the Department of Physics may take place at any time once the student is enrolled at NIU. This application should be made in writing to the physics education coordinator. Undergraduates should formally apply for admission during the first semester of their sophomore year, except in the case of transfer students who normally apply during their first semester at NIU. Graduate students and students who already possess the baccalaureate or higher degree and wish to pursue certification and/or endorsement with or without becoming a candidate for a degree, should apply for admission to the coordinator of physics education as early as possible. All certification students should seek advising as soon after enrollment as possible.

Admission

The student must have completed at least PHYS 210 and PHYS 211 or PHYS 253 and PHYS 273, or their equivalents as determined by the coordinator, and apply in writing to the physics education coordinator. To be admitted, the student must be enrolled in a degree program leading to a degree appropriate to certification being pursued or be in possession of an appropriate degree from an accredited institution, and provide evidence of proficiency in reading, mathematics, and the language arts. Evidence of required proficiencies consists of passage of the ICTS Test of Basic Skills and a grade of C or better in all NIU core competency courses. The student must also have a satisfactory interview with the physics education coordinator in which the student demonstrates attitudes and motivations appropriate to the professional educator.

Requirements

PHYS 253 - Fundamentals of Physics I: Mechanics, and PHYS 273 - Fundamentals of Physics II: Electromagnetism (8)
PHYS 283 - Fundamentals of Physics III: Quantum Physics (3), and PHYS 284 - Quantum Physics Laboratory (1)
PHYS 495 - Teaching of Physical Sciences (3)
PHYS 496 - Transition to the Professional Physics Teacher (1)
PHYS 497 - Student Teaching (Secondary) in Physics/Physical Sciences (7-12)

A minimum of 20 additional hours of physics must be taken for certification.

The State of Illinois has moved from a course-based set of requirements for certification to course and standards-based requirements. Approved certification programs must have requirements that meet or exceed the state requirements. A list of the current state minimum requirements is available from the Illinois State Board of Education web page. The physics certification program requirements are designed to prepare candidates for certification both to meet state requirements and to demonstrate that they meet state teaching standards.

At this time requirements include the possession of an appropriate baccalaureate degree from an accredited institution, a minimum of 32 semester hours in the field, pre-student teaching clinical experiences at the 6-12 level or proof of teaching experience at the 6-12 level, student teaching or an approved teaching experience, passage of the basic skills and secondary certificate subject matter examinations of the Illinois Certification Testing System and demonstration that the candidate has met teaching standards for the physics teacher. Contact the discipline coordinator for information on the necessary criteria that experiences must meet to be used to meet certification requirements.

Additional course work is required as determined and approved by the physics education coordinator to meet state standards for the preparation of teachers, certification requirements and student needs. Students must also qualify for an endorsement in a subject area in addition to physics.

Retention

A minimum GPA of 2.50 in all undergraduate course work at NIU and a minimum 3.00 GPA in all graduate course work at NIU.

Satisfactory review of progress with the physics education coordinator each semester after admission to the certification program.

Degree with Honors

To be eligible for the baccalaureate degree with honors in physics a student must maintain a GPA of at least 3.25, must have an average of 3.50 or above in the courses required in the chosen emphasis, and must complete, with a satisfactory grade, PHYS 499H.

Minor in Physics (21-24)

*MATH 229 - Calculus I (4)
*PHYS 253 - Fundamentals of Physics I: Mechanics, and PHYS 273 - Fundamentals of Physics II: Electromagnetism (8),
OR *PHYS 210 and *PHYS 211 - General Physics I and II (8), and PHYS 252 - Intermediate General Physics (3)
PHYS 300 - Analytical Mechanics I (3)
PHYS 370 - Electricity and Magnetism I (3)
One course at the 300 level or above (3)

Six or more semester hours in the minor must be taken at NIU.

* Available for general education credit

Course List

140. PHYSICS AND SOCIETY (3). Energy sources and pollution (conventional and nuclear); energy from outer space and atmospheric neutrons; the supersonic transport controversy–sonic boom, radiation hazards, weather disturbances; power for transportation; physics and weapons (e.g., atomic bombs and antiballistic missiles); tornadoes and weather control; physics in medicine, radioactive tracers, medical instruments from physics; social impact of the transistor; the LASER. Two lectures and one seminar-laboratory per week.

150. PHYSICS (3). Development of concepts and principles from selected topics in mechanics, electricity, heat, sound, and light. Application to everyday life. Not recommended for students who have had a year of high school physics. Not available for credit to students with credit in PHYS 150A.

150A. PHYSICS (4). Development of concepts and principles from selected topics in mechanics, electricity, heat, sound, and light. Application to everyday life. Not recommended for students who have had a year of high school physics. Not available for credit to students with credit in PHYS 150. Three hours of lecture and two hours of laboratory per week.

162. ELEMENTARY ASTRONOMY (3). Introduction to astronomical science extending from planetary astronomy through the most recent discoveries and speculations of astrophysics, such as pulsars, “black holes” and the latest hypotheses regarding stellar evolution and cosmology.

180. ACOUSTICS, MUSIC, AND HEARING (3). Elementary study of acoustics designed especially for students with an interest in music, speech and hearing, the theatre, or sound recording. Topics include the waves and vibrations, perception and measurement of sound, acoustics of musical instruments, speech and singing, and the acoustics of rooms.

181. ACOUSTICS LABORATORY (1). A laboratory course designed to be taken concurrently with PHYS 180. The first part of the semester consists of experiments that provide an introduction to accoustical measurements with modern electronic instruments. During the remainder of the course students choose experiments which fit their own particular interests. Course may be repeated once. CRQ: PHYS 180 or consent of the department.

201X. THE PROFESSIONAL SECONDARY SCIENCE TEACHER (1). *Crosslisted as BIOS 201X, CHEM 201X, and GEOL 201.* An introduction to the role of the professional science teacher. Includes philosophical trends in teaching (and how they affect the science teacher), major factors affecting how science is taught, and an introduction to science content/ teaching standards. CRQ: ILAS 201.

210. GENERAL PHYSICS I (4). First semester of a two-semester sequence covering mechanics, heat, and sound. Includes lecture and laboratory sessions. Not available for credit to students with credit in PHYS 250, PHYS 250A, or PHYS 253. PRQ: MATH 155 or equivalent.

211. GENERAL PHYSICS II (4). Second semester of a two-semester sequence covering electricity and magnetism, light and quantum physics. Includes lecture and laboratory sessions. Not available for credit to students with credit in PHYS 251, PHYS 251A, or PHYS 273. PRQ: PHYS 210 or PHYS 250 or PHYS 250A or PHYS 253.

252. INTERMEDIATE GENERAL PHYSICS (3). Topics in mechanics, electricity, and magnetism using calculus. Serves as a “bridge” between the material presented in PHYS 210-PHYS 211 and the 300-level intermediate courses. Not available for credit to students with credit in PHYS 251A or PHYS 273. PRQ: PHYS 211 or PHYS 251. CRQ: MATH 230.

253. FUNDAMENTALS OF PHYSICS I: MECHANICS (4). Physical laws governing motion, force, energy, rotation, and vibration using calculus. Primarily for majors in the physical and mathematical sciences and engineering. One three-hour laboratory a week. Not available for credit to students with credit in PHYS 210, PHYS 250, or PHYS 250A. CRQ: MATH 229.

273. FUNDAMENTALS OF PHYSICS II: ELECTROMAGNETISM (4). Physical laws governing electricity and magnetism using calculus. Primarily for majors in the physical and mathematical sciences and engineering. One three-hour laboratory a week. Not available for credit to students with credit in PHYS 211, PHYS 251, or PHYS 251A. PRQ: PHYS 250A or PHYS 253. CRQ: MATH 230.

283. FUNDAMENTALS OF PHYSICS III: QUANTUM PHYSICS (3). Physical laws governing optics, atomic, solid state, nuclear, and elementary particle physics using calculus. Not available for credit to students with credit in PHYS 260 or PHYS 261. PRQ: MATH 230 and PHYS 251A or PHYS 252 or PHYS 273.

284. QUANTUM PHYSICS LABORATORY (1). Laboratory component of PHYS 283. One three-hour laboratory a week. Not available for credit to students with credit in PHYS 261 or PHYS 262. CRQ: PHYS 283.

300. ANALYTICAL MECHANICS I (3). Newton’s laws of motion applied to simple objects. Study of harmonic oscillators, central forces, conservation principles, dynamics of a system of particles, and moving coordinate systems. Use of vectors and differential equations. PRQ: MATH 232 and PHYS 250A or PHYS 252 or PHYS 253. CRQ: MATH 336.

301X. THE INTERDISCIPLINARY SECONDARY SCIENCE TEACHER (1). *Crosslisted as BIOS 301X, CHEM 301X, and GEOL 301*. Seminar on the role of a science teacher in an interdisciplinary and/ or integrated science class and how a science curriculum is designed based on state and national standards. Focus on skills all science teachers must possess regardless of specific discipline Including knowing how to apply the following topics in ways appropriate to the age and development of the students in a classroom; safety procedures, classroom management, designing and conducting demonstrations, experiments, performance assessments, differentiated curriculum and uses of technology. CRQ: ILAS 301, PHYS 493.

315. AUDIO AND ELECTROACOUSTICS (3). The science of sound with emphasis on audio systems, microphones, loudspeakers, disc and tape recording, room acoustics, electronic music, digital techniques, and electronic instruments. PRQ: PHYS 180 or PHYS 211 or PHYS 250A or PHYS 251 or PHYS 253.

320. THERMODYNAMICS AND STATISTICAL PHYSICS (3). Concept and measurement of temperature. Study of the first and second laws of thermodynamics, entropy, and the statistical theory of simple systems. PRQ: MATH 232 and PHYS 260 or PHYS 261 or PHYS 283.

335. BIOPHYSICS (3). Application of basic physics to biological systems. Topics include biomechanics, fluid transport, bioelectricity, and nerve impulses. Interaction of electromagnetic radiation with living matter. Diagnostic instrumentation including x-rays, magnetic resonance imaging, and radioisotopes in medicine and biology. PRQ: BIOS 209 and PHYS 211 or PHYS 251 or PHYS 251A or PHYS 273.

344. ASTRONOMY (3). *Crosslisted as GEOL 344X.* Modern views on the structure of the universe. Our solar system, stars, galaxies, and quasars. Astronomy as an interdisciplinary science, emphasizing the underlying physical principles. PRQ: PHYS 211 or PHYS 251 or PHYS 283.

359. TOPICS IN PHYSICS (1 to 3). Current topics of interest and concern to the general public as well as to professional scientists. Not open to physics majors. May be repeated to a maximum of 3 semester hours. PRQ: PHYS 211 or PHYS 251, and consent of department.

367. WAVES AND VIBRATIONS (3). Free and forced vibrations, coupled oscillators, properties of waves, reflection, diffraction, and interference. PRQ: MATH 232 and PHYS 250A or PHYS 252 or PHYS 253. CRQ: MATH 336.

370. ELECTRICITY AND MAGNETISM I (3). Behavior of electric and magnetic fields. Study of electrostatics, magnetostatics, and the electric and magnetic properties of matter. Use of vector calculus. PRQ: MATH 232 and PHYS 260 or PHYS 261 or PHYS 283. CRQ: MATH 336.

374. INTRODUCTION TO EXPERIMENTAL PHYSICS (3). Selected experiments from classical and modern physics stressing laboratory practices and current measurement techniques such as STM and SQUID. Includes lecture and one four-hour laboratory a week. PRQ: PHYS 261 or PHYS 262 or PHYS 284.

375. LABORATORY ELECTRONICS I (4). Fundamentals of circuit analysis and the physics of electronic devices. Topics include DC and AC circuits, signal transmission, noise, feedback, semiconductors,

transistors, operational amplifiers, and simple digital logic. Includes three hours of lecture and one three-hour laboratory a week. PRQ: PHYS 252 or PHYS 273.

385. METHODS OF MATHEMATICAL PHYSICS I (3). Mathematical techniques used in physics problems. Vector calculus, linear operators, matrices, boundary value problems, and Fourier series. PRQ: MATH 336 and PHYS 300.

400. ANALYTICAL MECHANICS II (3). Motion of complex systems. Study of oscillating, rotating, and vibrating systems, non-linear mechanics, mechanics of continuous media, and relativistic mechanics. Use of Fourier analysis, tensors, and Lagrangian and Hamiltonian formulation. PRQ: PHYS 300.

401. THE PROFESSIONAL PHYSICS TEACHER (1). Seminar directed to designing physics instruction to meet state and national standards. Attention given to skills physics teachers must possess related to the design and use of instructional methods. Includes a minimum of 40 hours of observation in the physics classroom. CRQ: PHYS 495.

410. COMPUTATIONAL PHYSICS (3). Techniques of physics problem solving using computers. Application of numerical analysis, linear analysis, iterative methods, and Monte Carlo simulation to problems in classical and modern physics. Use of equation solving software and high-level programming languages. PRQ: PHYS 300, PHYS 370, and CSCI 240, or consent of department.

420. ACOUSTICS I (3). Vibrating strings, bars and plates, acoustic wave equation, transmission and absorption of sound, radiation, and filters. PRQ: PHYS 367 or MEE 322; and MATH 334 or MATH 336.

430. OPTICS (4). Geometrical, physical, quantum, and experimental optics with emphasis on topics of current interest. Three lectures plus a 3-hour laboratory weekly. PRQ: PHYS 370.

434. NUCLEAR ENERGY AND RADIATION (3). Radiation from nuclear reactions and the interaction of radiation with matter. Nuclear fission, fusion, radioactivity, radiation detection, dose determinations, and shielding. PRQ: PHYS 260 or PHYS 261 or PHYS 283.

459. SPECIAL PROBLEMS IN PHYSICS (1 to 3). Problems may be technical in nature or concerned with teaching procedure. Under supervision of physics staff. May be repeated to a maximum of 3 semester hours.

460. QUANTUM PHYSICS (3). Schrodinger wave equation, eigen-values and eigen-functions, methods of approximation and applications to the square well, the harmonic oscillator, and hydrogen-like atoms. PRQ: PHYS 300 and PHYS 370.

461. MODERN PHYSICS (3). Applications of quantum physics to atoms, molecules, solids, nuclei, and elementary particles. PRQ: PHYS 460.

463. THERMODYNAMICS, KINETIC THEORY, AND STATISTICAL MECHANICS (3). Review of such topics as the laws of thermodynamics, the entropy concept, and thermodynamic potentials. Probability, distribution functions and transport phenomena. Introductory treatment of classical and quantum-mechanical statistical mechanics. Emphasis on applications to areas of modern physics. PRQ: PHYS 320 or consent of department.

467. NOISE AND VIBRATION CONTROL (3). Includes mechanical vibrations, damping, resonance, vehicle noise, acoustical enclosures, and techniques of noise abatement and measurement. PRQ: PHYS 300 or PHYS 367.

470. ELECTRICITY AND MAGNETISM II (3). Maxwell's equations; propagation, reflection, and transmission of electromagnetic waves; wave guides; dipole radiation; radiation by point charges; electrodynamics in special relativity. PRQ: PHYS 300 and PHYS 370, or consent of department.

472. PHYSICAL MEASUREMENTS (2). Special laboratory problems. PRQ: Consent of department.

474. METHODS OF EXPERIMENTAL PHYSICS (3). Basic techniques of experimental physics, including high-vacuum techniques, digital electronics, design and construction of research apparatus, and radiation safety. Open to graduate students and advanced undergraduate students in all sciences. Strongly recommended for all graduate students in physics. PRQ: PHYS 375 or consent of department.

475. LABORATORY ELECTRONICS II (4). Applications and use of integrated circuits for experimental measurement and control. Includes digital electronics, digital-to-analog and analog-to-digital conversion, mini and microcomputers, power supplies, and active filters and oscillators. Lecture and one 3-hour laboratory period a week. PRQ: PHYS 375 or consent of department.

477. ASTROPHYSICS (3). Kepler's laws and solar system, analysis of solar radiations, nuclear reactions in the sun, and other selected topics. PRQ: PHYS 283 and PHYS 300.

480. INTRODUCTION TO MATERIALS SCIENCE (3). Mechanical, thermal, electrical, optical, and structural properties of modern engineering materials. PRQ: PHYS 300 and PHYS 370.

485. METHODS OF MATHEMATICAL PHYSICS II (3). Tensor analysis. Functions of complex variable residue calculus, partial differential equations of mathematical physics and Green's function. PRQ: PHYS 385.

490X. SCIENCE ACROSS TIME AND CULTURE (2). *Crosslisted as BIOS 484X, CHEM 490X, and GEOL 475.* Examination of major concepts of science, and how they evolved. Comparison and contrast of the role and practice of science in various cultures and examination of the interaction between science, technology, and culture. PRQ: PHYS 250A or PHYS 253, PHYS 251A or PHYS 273, and PHYS 261, or consent of department.

492. SCIENCE TEACHING IN THE ELEMENTARY, MIDDLE, AND JUNIOR HIGH SCHOOL: GRADES K-9 (3). *Crosslisted as GEOL 486X.* Selected instructional methods and materials for teaching science in elementary, middle, and junior high schools with emphasis on the physical sciences. Analysis of modern curricula and practice in the use of associated laboratory materials developed for use at all levels from grades K-9. Designed for the classroom teacher and pre-teacher, but open to science supervisors and administrators. Not available for credit in the major. PRQ: A general physical science course or equivalent and consent of department.

493X. INTERDISCIPLINARY TEACHING OF SCIENCE IN SECONDARY EDUCATION (3). *Crosslisted as BIOS 402X, CHEM 493X, and GEOL 483.* Methods and theory for the teaching of interdisciplinary science in grades 6-12. The nature and purpose of science and its underlying assumptions, the social and cultural challenges in science teaching, and the potential solutions to these challenges are explored through research, discussion, and reflection. Requirements include using state and national science standards to develop student learning objectives and to design inquiry-based lesson plans, micro-teaching, construction and use of assessment rubrics, and ongoing development of a professional portfolio.

494. USE OF TECHNOLOGY IN SECONDARY SCIENCE TEACHING (2). *Crosslisted as GEOL 484X.* Selected methods for the evaluation and use of technology in both the instructional and laboratory setting in secondary science education. Topics may include the interfacing of computers for data acquisition in the laboratory, strategies for integrating the Internet into the curriculum, and use of video/multimedia equipment. PRQ: Consent of department.

495. TEACHING OF PHYSICAL SCIENCES (3). *Crosslisted as CHEM 495X, GEOG 495X, and GEOL 495X.* Preparation for certification in grades 6-12 in one or more of the fields of physical science: physics, chemistry, earth science, and general science. Examination and analysis of modern curricula; classroom and laboratory organization; microteaching and observation of teaching; lesson planning; multicultural education; teaching science to the exceptional child; reading and the teaching of science; methods of evaluation. PRQ: Consent of department. CRQ: ILAS 401.

496. TRANSITION TO THE PROFESSIONAL PHYSICS TEACHER (1). A transitioning experience in which the certification candidate achieves closure on the initial phase of professional preparation and, upon that foundation, charts a path for continuing professional growth as a practicing teacher. Candidate will reflect on the preparatory experience and complete documentation demonstrating ability to perform as a qualified physics teacher. Such documentation will include, but not be limited to, the electronic portfolio, a professional development plan, and a resume. Directly addresses all INTASC, NSTA, and ISBE standards. CRQ: PHYS 497 or consent of department.

497. STUDENT TEACHING (SECONDARY) IN PHYSICS/PHYSICAL SCIENCES(7 to 12). Student teaching in grades 6-12 for 10 weeks or for one semester. Assignments to be arranged with the College of Liberal Arts and Sciences Teacher Placement Office after approval by the Department of Physics. Not available for credit in the major. PRQ: PHYS 495 and consent of department.

498. SENIOR SEMINAR (1). Topics of current interest in physics and physics education. Attendance at the Department of Physics colloquium series required. PRQ: PHYS 374 and senior standing in physics.

499H. SENIOR PROJECT IN PHYSICS (3). Program of study and research in a special area of physics selected in consultation with a faculty member and approved by the department chair. Project results evaluated by a faculty panel. A student who receives credit for PHYS 499H may not also receive credit towards the major in PHYS 459. PRQ: PHYS 374 and senior standing in physics.

Physics Faculty

Susan M. Mini, Ph.D., Southern Illinois University, professor, chair
Ralph Benbow, Ph.D., Iowa State University, associate professor
Gerald Blazey, Ph.D., University of Minnesota, Distinguished Research Professor
Courtlandt L. Bohn, Ph.D., University of Chicago, professor
Dennis Brown, Ph.D., Stanford University, associate professor
Dhiman Chakraborty, Ph.D. State University of New York, Stony Brook, assistant professor
Omar Chmaissem, Ph.D., Université Joseph Fourier (Grenoble), assistant professor
Bogdan Dabrowski, Ph.D., Northwestern University, Distinguished Research Professor
Bela Erdelyi, Ph.D., Michigan State University, assistant professor
Michael Fortner, Ph.D., Brandeis University, assistant professor
David Hedin, Ph.D., University of Wisconsin, Distinguished Research Professor
Zdenek D. Hurych, Ph.D., Charles University, Distinguished Research Professor, emeritus
Yasuo Ito, Ph.D., Cambridge University, associate professor
Laurence Lurio, Ph.D., Harvard University, associate professor
Stephen P. Martin, Ph.D., University of California at Santa Barbara, Presidential Research Professor
Philippe Piot, Ph.D., University of Grenoble (France), associate professor
Carol Thompson, Ph.D., University of Houston, professor
Michel van Veenendaal, Rijksuniversity (Groningen), associate professor
Suzanne E. Willis, Ph.D., Yale University, professor
Augden Windelborn, Ed.D., Northern Illinois University, assistant professor
Roland Winkler, Ph.D., University of Regensburg (Germany), associate professor
Zhili Xiao, Ph.D., University of Konstanz (Germany), associate professor

Department of Political Science (POLS)

The Department of Political Science offers the B.A. and B.S. degree with a major in political science with emphases in politics, public law, public administration and service, and international politics.

The emphasis in politics is designed for students who want maximum flexibility within their program of study or wish to create a particular specialization within political science, such as American government, biopolitics, or political theory.

The emphasis in public law is designed for political science students interested in public law, although students seeking admission to law school need not be political science majors nor must they follow any particular course of study. Students with an interest in pre-law should see "Pre-professional Studies."

The emphasis in public administration and service is designed primarily for students seeking a career in public affairs in federal, state, or local governments; in voluntary social agencies or public interest groups; and for careers in business emphasizing the interaction between private enterprise and government.

The emphasis in international politics is for students seeking international careers, especially in governmental agencies and business.

Internship opportunities with academic credit are available through the department. Interested students should contact the department's internship coordinator.

The department also offers a minor for students with an interest in politics. In addition, it participates in the interdisciplinary minors in black studies, Chinese/Japanese studies, classical studies, environmental studies, gerontology, international studies, Latino and Latin American studies, public administration, Southeast Asian studies, urban studies, and women's studies. Non-majors can use one of several lower-division political science courses toward fulfilling the university's general education requirements in the social sciences area.

Department Restriction

A student may take no more than 15 semester hours in 100- and 200-level political science courses to be counted toward a political science major and no more than 9 semester hours in 100- and 200-level political science courses to be counted toward a political science minor.

Major in Political Science (B.A. or B.S.)

Field Distribution Requirement

To ensure that all political science majors are familiar with a variety of approaches, subject matter, and perspectives within the political science discipline, each student, regardless of the degree program or emphasis he or she selects, must take at least one course in each of five of the following seven fields.

American government
Comparative politics
Empirical theory and behavior
International politics
Political theory
Public law
Public policy/public administration

In fulfilling this requirement, a particular course may be counted in one field only, even if it is crosslisted in more than one field. Related courses from other departments may be substituted for political science courses with the prior written approval of the department chair.

POLS 100 satisfies the field distribution requirement for American government and is a prerequisite for certain upper-level courses. Numbered courses ending in 90-99 vary widely in content and often do not deal with a single or specific field of political science. Such courses cannot be used to meet the field distribution requirement except in special cases with the written permission of the department chair. All other political science courses, whether taken to satisfy the B.A. or B.S. degree requirements or the requirements in a particular emphasis, are included in meeting the required distribution.

Emphasis 1. Politics

Requirements in Department (36)

POLS 100 - American Government and Politics (3),
  OR POLS 150 - Democracy in America (3)
Two of the following (6)
  POLS 220 - Introduction to Public Policy (3)
  POLS 251 - Introduction to Political Philosophy (3)
  POLS 260 - Introduction to Comparative Politics (3)
  POLS 285 - Introduction to International Relations (3)
Electives in political science (27)
  Students must ensure that the field distribution requirement is met. Students pursuing the B.S. degree must complete POLS 340 - Political Analysis (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)

For the B.A. degree
Fulfillment of the foreign language requirement (0-12)
  (See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
Laboratory science/mathematical/computational skills sequence (10-19) [Students selecting a sequence that does not include STAT 301 (4) or STAT 350 (3) will also be required to take one of these courses.]
  (See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 1, Politics: 36-48 (B.A.) OR 50-51 (B.S.)

Emphasis 2. Public Law

Requirements in Department (36)

POLS 100 - American Government and Politics (3),
  OR POLS 150 - Democracy in America (3)
Two of the following (6)
  POLS 220 - Introduction to Public Policy (3)
  POLS 251 - Introduction to Political Philosophy (3)
  POLS 260 - Introduction to Comparative Politics (3)
  POLS 285 - Introduction to International Relations (3)
Two of the Following (6)
  POLS 410 - Constitutional Law I (3)
  POLS 411 - Constitutional Law II (3)
  POLS 412 - Constitutional Law III (3)
One of the Following (3)
  POLS 317 - Judicial Politics (3)
  POLS 323 - Biomedicine and the Law (3)
  POLS 414 - Topics in Law and Social Problems (3) (may be repeated to 6 semester hours)

POLS 415 - Criminal Law (3)
POLS 418 - Jurisprudence (3)
POLS 452 - Religion and the Constitution (3)
POLS 480 - International Law and Organization (3)
POLS 495[1] - Seminar in Current Problems (3)
One additional course from either of the two preceding lists (3)
Electives in political science (15)
Students must ensure that the field distribution requirement is met. Students pursuing the B.S. degree must complete POLS 340 - Political Analysis (3).

Requirements outside Department (B.A., 0-12; B.S., 10-15)
For the B.A. degree
Fulfillment of the foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")
For the B.S. degree
Laboratory science/mathematical/computational skills sequence (10-15) [Students selecting a sequence that does not include STAT 301 (4) or STAT 350 (3) will also be required to take one of these courses.]
(See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 2, Public Law: 36-48 (B.A.) OR 46-51 (B.S.)

Recommendations
HIST 478 - American Legal History to 1865 (3)
HIST 479 - American Legal History Since 1865 (3)

Emphasis 3. Public Administration and Service

Requirements in Department (36)
POLS 100 - American Government and Politics (3),
OR POLS 150 - Democracy in America (3)
Two of the following (6)
POLS 220 - Introduction to Public Policy (3)
POLS 251 - Introduction to Political Philosophy (3)
POLS 260 - Introduction to Comparative Politics (3)
POLS 285 - Introduction to International Relations (3)
POLS 330 - Bureaucracy and the Public Policy Process (3),
OR POLS 331 - Public Administration (3)
Two of the following (6)
POLS 322 - Politics and the Life Sciences (3)
POLS 323 - Biomedicine and the Law (3)
POLS 324 - Politics of Energy and the Environment (3)
POLS 325 - Politics of Regulation (3)
POLS 326 - Government and Welfare (3)
POLS 382 - U.S. Foreign Policy Making (3)
One of the following (3)
POLS 302 - Government in Metropolitan Areas (3)
POLS 303 - Local Government and Politics (3)
POLS 305 - Political Parties and Elections (3)
POLS 307 - The Legislative Process (3)
POLS 308 - The American Chief Executive (3)
Electives in political science (15)
Students in the public administration and service emphasis are strongly encouraged to take POLS 439 - Internship in Administration. Students must ensure that the field distribution requirement is met. Students pursuing the B.S. degree must complete POLS 220 - Introduction to Public Policy (3), and POLS 340 - Political Analysis (3). The B.S. is highly recommended for students planning careers in public policy and public administration.

Requirements outside Department (B.A., 0-12; B.S., 10-15)
For the B.A. degree
Fulfillment of the foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")
For the B.S. degree
Laboratory science/mathematical/computational skills sequence (10-15) [Students selecting a sequence that does not include STAT 301 (4) or STAT 350 (3) will also be required to take one of these courses.]
(See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 3, Public Administration and Service: 36- 48 (B.A.) OR 46-51 (B.S.)

Recommendation
Students are strongly advised to minor in business administration, communication studies, economics, family life (School of Family, Consumer, and Nutrition Sciences), international studies, journalism, sociology, or urban studies.

Emphasis 4. International Politics

Requirements in Department (36)
POLS 100 - American Government and Politics (3),
OR POLS 150 - Democracy in America (3)
Two of the Following (6)
POLS 220 - Introduction to Public Policy (3)
POLS 251 - Introduction to Political Philosophy (3)
POLS 260 - Introduction to Comparative Politics (3)
POLS 285 - Introduction to International Relations (3)
Two of the Following (6)
POLS 362 - Politics of Developing Areas (3)
POLS 380 - American Foreign Policy (3)
POLS 381 - The U.S. and Latin America (3)
POLS 382 - U.S. Foreign Policy Making (3)
POLS 383 - Changing World Political Economy (3)
POLS 386 - Global Terrorism (3)
POLS 387 - East Asia and International Politics (3)
POLS 388 - U.S. National Security Policy (3)
POLS 480 - International Law and Organization (3)
POLS 483 - Russian Foreign Policy (3)
Two of the following (6)
POLS 360 - Government and Politics in Western Europe (3)
POLS 361 - British Government and Politics (3)
POLS 364 - Canadian Politics (3)
POLS 365 - Government and Politics in Eastern Europe (3)
POLS 366 - Politics of Russia and Eurasia (3)
POLS 368 - Governmental Systems in Africa (3)
POLS 371 - Politics in Southeast Asia (3)
POLS 372 - Politics of China, Japan, and Korea (3)
POLS 373 - Women and Politics (3)
POLS 374 - Minorities in Politics (3)
POLS 375 - Middle East Politics (3)
POLS 376 - Political Violence (3)
POLS 469 - Topics in Latin American Politics (3)
One additional course from either of the two preceding lists (3)
Electives in political science (12)
Students must ensure that the field distribution requirement is met. Students pursuing the B.S. degree must complete POLS 340 - Political Analysis (3)

Requirements outside Department (B.A., 0-12; B.S., 10-15)
For the B.A. degree
Fulfillment of the foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")
For the B.S. degree
Laboratory science/mathematical/computational skills sequence (10-19) [Students selecting a sequence that does not include STAT 301 (4) or STAT 350 (3) will also be required to take one of these courses.]
(See "College Requirement for the B.S. Degree")

Total Hours for Emphasis 4, International Politics: 36-48 (B.A.) OR 46-51 (B.S.)

[1] May be counted toward the emphasis when topic is appropriate

Recommendation

Students desiring a career in international affairs are advised to develop a high degree of competence in one or more foreign languages, to become familiar with political systems other than that of the United States, and to enroll in the interdisciplinary international studies minor.

Teacher Certification

Students who want to be certified to teach political science/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in political science.

Admission

Students are admitted to the certification program when they have

established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;

attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;

completed at least 6 semester hours of political science at NIU and earned a minimum GPA of 3.00 in all political science courses taken at the college/university level;

completed the core competency requirements in English and oral communication;

completed at least 20 clock hours of approved early clinical experiences; and

obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in political science. In addition, they must complete POLS 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, POLS 496X must be taken in the semester immediately prior to enrollment in student teaching.

Other Requirements

Students must complete HIST 400, Student Teaching in History/Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the Department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

Majors with at least a 3.25 cumulative GPA are eligible for the Political Science Honors Program. The B.A. or B.S. degree with honors in political science is awarded to successful candidates.

The Political Science Honors Program is separate from the University Honors Program, but students admitted to both programs may, with permission, use their political science honors thesis to satisfy the University Honors Program's requirement of a senior year independent study project. Details about the program are available in the department office (Zulauf 315).

Requirements

Approval by the department chair or assistant chair for admission to the program

Maintenance of at least a 3.50 GPA in all political science courses and a 3.25 GPA in all university courses

Successful completion of the junior honors seminar, POLS 397H

Successful completion of the senior honors thesis course, POLS 499H. The honors thesis must be approved by the student's thesis director and a faculty member appointed by the department chair.

Minor in Political Science (18)

*POLS 100 - American Government and Politics (3),
  OR *POLS 150 - Democracy in America (3)
One of the following (3)
  POLS 220 - Introduction to Public Policy (3)
  POLS 251 - Introduction to Political Philosophy (3)
  POLS 285 - Introduction to International Relations (3)
Electives in political science (12)

Six or more semester hours in the minor must be taken at NIU.

Course List

Many of the courses offered by the department relate to more than one of the seven fields of political science. However, as a general guide to the student, the following numbering system is used.

–00 to –09, American government
–10 to –19, Public law
–20 to –39, Public policy/public administration
–40 to –49, Empirical theory and behavior
–50 to –59, Political theory
–60 to –79, Comparative politics
–80 to –89, International relations
–90 to –99, General

American Government and Politics

100. AMERICAN GOVERNMENT AND POLITICS (3). Principles, processes, and problems of American government and politics. Examines the impact of changes in contemporary American politics.

295. CRITICAL ISSUES IN AMERICAN POLITICS (3). Studies in the nature and conduct of American democracy, its problems and prospects. Topics vary each semester and include such concerns as political morality, the use and abuse of power, the political role of the individual, rights and privileges of citizens, and the analysis of specific political administrations. May be repeated once as topic changes.

302. GOVERNMENT IN METROPOLITAN AREAS (3). Examination of the political and structural elements of government in metropolitan areas. Emphasis on the impact of public and private influences exercised through the network of government agencies upon urban regions. PRQ: At least sophomore standing or consent of department. Recommended: POLS 303.

* Available for general education credit.

303. LOCAL GOVERNMENT AND POLITICS (3). Structure, functions, and dynamics of community political systems. Local legislative, executive, and electoral processes.

304. AMERICAN PUBLIC OPINION (3). American political values, attitudes, and beliefs, the factors that influence their development, and the role of public opinion in American democracy. Survey research methods, including sampling, questionnaire design, and data collection methods. PRQ: POLS 100 or consent of department.

305. POLITICAL PARTIES AND ELECTIONS (3). Examination of the development, organization, and functions of political parties and elections in the American political system. Topics include the nature and function of political parties, nominations and elections, political campaigns and campaign finance, voting behavior and party realignment issues, and the role of the party in government policy-making. PRQ: POLS 100 or POLS 150.

306. THE MASS MEDIA IN AMERICAN POLITICS (3). Examination of the influence of the mass media on American politics including the impact of new communication technologies on campaigning strategies and on the public information activities of government agencies. PRQ: POLS 100 or consent of department. Recommended: POLS 305.

307. THE LEGISLATIVE PROCESS (3). Principles, organization, procedures, and activities of American legislatures, with emphasis on the U.S. Congress. Topics include legislators and their districts, legislative committees, party leadership positions, and legislative-executive relations. PRQ: At least sophomore standing or consent of department. Recommended: POLS 100.

308. THE AMERICAN CHIEF EXECUTIVE (3). Selection, tenure, succession, and leadership of the American chief executive in the policy, administrative, and legislative processes of government. PRQ: At least sophomore standing or consent of department. Recommended: POLS 100.

309. POLITICAL BEHAVIOR OF RACIAL MINORITIES IN THE UNITED STATES (3). Examination of the problems and prospects for racial minority political participation and development. Survey of racial minorities' involvement in politics; the interaction of various levels of government with respect to political processes and activities which affect and concern minorities. PRQ: At least sophomore standing or consent of department.

403. INTEREST GROUPS IN AMERICAN POLITICS (3). Examination of the growing influence of interest groups in American politics including the roles of major economic interest groups, the emergence of political action committees, the involvement of interest groups in campaign financing, personnel recruitment for the executive branch, and direct lobbying. PRQ: POLS 305 or consent of department.

406. FIELD WORK IN AMERICAN POLITICS (3). Application of political knowledge in actual political settings. Each student's participation and related research project in any semester to focus on one activity, such as an election campaign, interest group activity, or working for elected officials. PRQ: At least junior standing and consent of department.

407. POLITICAL ATTITUDE AND VALUE FORMATION (3). Formation, transmission, maintenance, and change of political attitudes. Topics include strategies for the conceptualization and measurement of attitudes and major theories of attitude change. PRQ: POLS 340 or consent of department. Recommended: POLS 304.

408. POLITICAL PARTICIPATION AND BEHAVIOR (3). Focus on the structural, psychological, and sociological factors associated with participation in the political process including both electoral and nonelectoral participation. Attention given to the impact of various levels and types of participation on the American and other major political systems. PRQ: POLS 407 or consent of department.

Public Law

317. JUDICIAL POLITICS (3). Organization and operation of trial and appellate courts, selection of judges, varieties of litigation, factors influencing judicial decision-making, and impact of and compliance with judicial decisions. PRQ: POLS 100.

410. CONSTITUTIONAL LAW I (3). Judicial, legislative, and executive powers, war and emergency powers, federalism, the commerce clause, taxing and spending powers, the state police power, inter- and intrastate relations, the Supreme Court and economic policy. PRQ: POLS 100 or consent of department.

411. CONSTITUTIONAL LAW II (3). Economic liberties and property rights, equal protection of the law, due process, incorporation of the Bill of Rights, right to counsel, right against compelled self-incrimination, right against cruel and unusual punishment, and right against unreasonable searches and seizures. PRQ: POLS 100 or consent of department.

412. CONSTITUTIONAL LAW III (3). The First Amendment: freedoms of speech, association, assembly, press, and religion, and the right to privacy. PRQ: POLS 100 or consent of department.

414. TOPICS IN LAW AND SOCIAL PROBLEMS (3). Examination and analysis of the enduring questions of importance for the legal system. Problems illustrating the intersection of law, morality, and politics are set in the context of contemporary issues. Specific focus of the course changes each semester. May be repeated once as topic changes. PRQ: POLS 100.

415. CRIMINAL LAW (3). Focus on substantive criminal law: functions of the criminal law, crimes against the person, crimes against property, attempt, conspiracy, solicitation, and crimes without victims. May include elements of criminal procedures. Recommended: POLS 317 and POLS 411.

418. JURISPRUDENCE (3). Analysis of the foundations of legal systems. Interrelationship of law, morality, and politics. PRQ: Two courses from among POLS 410, POLS 411, and POLS 412.

Public Policy/Public Administration

220. INTRODUCTION TO PUBLIC POLICY (3). Factors important in the policy process through an examination of selected issue areas such as health, the environment, energy, and economic regulation. Politics of evaluation and its uses.

320. BIOPOLITICS AND HUMAN NATURE (3). *Crosslisted as BIOS 320X.* The moral and political debates provoked by Darwinian biology in explaining human nature. Possible topics include sex differences, crime, the IQ debate, the moral sense, and the neurology of social behavior.

322. POLITICS AND THE LIFE SCIENCES (3). *Crosslisted as BIOS 322X.* Analysis of the major social problems and political issues emerging from rapid advances in the life sciences with emphasis on biotechnology and biomedical policy. PRQ: At least sophomore standing.

323. BIOMEDICINE AND THE LAW (3). Examination of judicial and legislative responses to developments in biomedicine. Evaluation of governmental role in medical and scientific decision making. PRQ: At least sophomore standing.

324. POLITICS OF ENERGY AND THE ENVIRONMENT (3). Political aspects of the major issues involved in contemporary policy-making respecting foreign and domestic energy supplies, various aspects of environmental policy, and status of publicly held lands. How federal, state, and local governments deal with these issues. PRQ: At least sophomore standing.

325. POLITICS OF REGULATION (3). Politics, procedures, and role of the regulatory agencies in the American government; the impact of regulatory decisions on industry, resources, and environments by regulatory bodies such as FAA, NRC, and FTC.

326. GOVERNMENT AND WELFARE (3). Political administrative analysis of domestic programs in areas such as social insurance, health, and education. Emphasis on both the politics of welfare and the substance of programs. PRQ: At least sophomore standing.

329. COMPARATIVE PUBLIC POLICY (3). Cross-national comparison of public policy politics, processes, and outcomes. PRQ: At least sophomore standing.

330. BUREAUCRACY AND THE PUBLIC POLICY PROCESS (3). Role of the bureaucracy in the formation and implementation of public policy. Includes the interaction of public agencies with other agencies, chief executives, legislatures, courts, other levels of government, parties, interest groups, and the media.

331. PUBLIC ADMINISTRATION (3). Leadership, decision making, organizational behavior, program effectiveness, and fiscal management in public administrative agencies.

439. INTERNSHIP IN ADMINISTRATION (3). Admission upon written departmental approval. Two days a week or equivalent in a government agency. S/U grading. Recommended: POLS 331.

Empirical Theory and Behavior

340. POLITICAL ANALYSIS (3). Concepts and principal methods of research in political science: techniques of gathering, analyzing, and interpreting data and reporting findings.

440. MAJOR MODES OF EMPIRICAL THEORY (3). Selected major empirical theoretical approaches: institutional analyses; the role of elites, systems and communications networks, game theory, decision making, and phenomenology. PRQ: POLS 340.

Political Theory

150. DEMOCRACY IN AMERICA (3). American democracy studied through the speeches and writings of political leaders involved in founding, preserving, and changing American politics and society. Emphasis on both democratic institutions and continuing problems of liberty and equality. *The Federalist Papers* and Tocqueville's *Democracy in America* are standard texts.

251. INTRODUCTION TO POLITICAL PHILOSOPHY (3). Discussion of the permanent questions of importance to political life such as "What is justice?" "What is the relationship between individual and political ethics?" "What is the relationship between political theory and political practice?" Discussion will proceed by studying political thought. Representative political thinkers are Plato, Machiavelli, Locke, Marx, and Dewey.

255. DEMOCRACY (3). Democracy and its critics from ancient Athens to modern America with consideration of different forms of democracy such as direct participation versus indirect representation. Authors studied include Aristotle, Rousseau, Jefferson, and Lincoln.

350. CLASSICAL AND MEDIEVAL POLITICAL THEORY (3). Analysis of the fundamental problems of classical and medieval political philosophy. PRQ: At least sophomore standing or consent of department.

351. LIBERALISM AND ITS CRITICS (3). Advocates and critics of the political philosophy of liberalism which contends that the purpose of civil society is to secure peaceful enjoyment of natural individual rights (life, liberty, and property). Representative authors include Hobbes, Locke, Smith, Rousseau, Burke, Marx, and Mill. PRQ: Sophomore standing or consent of department.

352. NIETZSCHE AND POSTMODERN POLITICS (3). Moral and political implications of the writings of Friedrich Nietzsche and of his influence in the 20th century. Possible additional authors include Heidegger and Derrida. PRQ: Sophomore standing or consent of department.

353. COURTING, MARRYING, AND POLITICS (3). Examination of both the political and the personal side of decisions whether to marry and whether to stay married. Readings of philosophers, poets, social scientists, novelists, theologians, the Bible. Topics include varieties of courting and marrying customs. Data on social and political consequences of marrying, not marrying, staying and not staying married.

354. NATURAL RIGHT AND LAW (3). Examination of the views of ancient, medieval, and modern political philosophers concerning the nature and foundation of justice and its relationship to law and the political order. Representative authors include Plato, Aristotle, Aquinas, and Montesquieu. PRQ: Sophomore standing or consent of department.

450. AMERICAN POLITICAL THOUGHT I (3). Analysis of the political thought of selected American statesmen and stateswomen having political responsibility at the critical moments in American history. Attention given to the relationship between the political philosophy in their thinking and the political actions they initiated. PRQ: At least junior standing or consent of department.

451. AMERICAN POLITICAL THOUGHT II (3). Analysis of topics in American political thought which reflect major political controversies in American history, for example, liberty and equality, liberalism and conservatism, American political rhetoric. Topics vary. May be repeated to a maximum of 6 semester hours. PRQ: At least junior standing or consent of department.

452. RELIGION AND THE CONSTITUTION (3). Examination of the constitutional relations of religion and American politics in light of modern political philosophy, the Founders' political thought, and historical and contemporary constitutional controversies involving religion. PRQ: At least junior standing or consent of department.

456. WAR, EMPIRE, AND ETHICS (3). Examination of questions of justice and interest as they arise in the context of war and imperial politics. Study of views of political philosophers, historians, and political leaders. Representative authors include Thuycidides, Machiavelli, Kant, and Churchill. PRQ: Junior standing or consent of department.

Comparative Politics

260. INTRODUCTION TO COMPARATIVE POLITICS (3). Comparative analysis of values, structures, and processes of selected foreign political systems, noting similarities to and differences from those of the United States.

360. GOVERNMENT AND POLITICS IN WESTERN EUROPE (3). Analysis of governmental institutions, political processes, and environmental factors which affect political behavior in representative European countries; includes a substantial component on the European community. PRQ: At least sophomore standing.

361. BRITISH GOVERNMENT AND POLITICS (3). Development, structure, functions, and processes of government and politics in Great Britain. PRQ: At least sophomore standing. Recommended: POLS 260.

362. POLITICS OF DEVELOPING AREAS (3). Broad comparative introduction to the problems and politics of developing areas (i.e., Asia, Latin America, Middle East). PRQ: At least sophomore standing. Recommended: POLS 260.

364. CANADIAN POLITICS (3). Examination of the performance of the Canadian system as a hybrid of the British and American political systems. PRQ: At least sophomore standing. Recommended: POLS 260.

365. GOVERNMENT AND POLITICS IN EASTERN EUROPE (3). Development, structure, and functioning of government and politics in the East European societies other than the USSR. PRQ: At least sophomore standing. Recommended: POLS 260.

366. POLITICS OF RUSSIA AND EURASIA (3). Comparative analysis of politics and government in Russia and other selected Eurasian states, with emphasis on developments since the breakup of the Soviet Union. PRQ: At least sophomore standing. Recommended: POLS 260.

368. GOVERNMENTAL SYSTEMS IN AFRICA (3). Colonialism and nationalism in Africa; the emergence of independent governments; contemporary political and administrative problems. PRQ: At least sophomore standing.

371. POLITICS IN SOUTHEAST ASIA (3). Comparative study of governmental and political institutions and processes in countries such as Vietnam, Malaysia, Kampuchea, Laos, Thailand, and Indonesia. Focus on issues such as ideological and minority conflicts, insurgencies, refugees, military rule, prospects for democracy, and United States interests in Southeast Asia. PRQ: At least sophomore standing.

372. POLITICS OF CHINA, JAPAN, AND KOREA (3). Examination of political processes and public policies of three major nations of Northeast Asia with emphasis on government institutions and economic development. PRQ: At least sophomore standing.

373. WOMEN AND POLITICS (3). Focus on women's political roles from a variety of cultural perspectives; emphasizes political socialization, access to the policy process, and women as politicians and decision-makers. PRQ: At least sophomore standing.

374. MINORITIES IN POLITICS (3). Analysis of how different political systems handle the problems posed by the existence of ethnic differentiations within the population; the techniques of government to effect integration and identification with the nation-states, and the activities of minorities in response to governmental policies. Emphasis on different regions of the world for illustrative materials depending on the instructor. PRQ: At least sophomore standing. Recommended: POLS 260.

375. MIDDLE EAST POLITICS (3). Comparative examination of selected Middle Eastern states, with emphasis on contemporary political systems, public policies, and foreign relations. PRQ: At least sophomore standing. Recommended: POLS 260.

376. POLITICAL VIOLENCE (3). Introduction to theories of political conflict, political opposition, and methods of concluding violent conflicts, including war. PRQ: At least junior standing.

469. TOPICS IN LATIN AMERICAN POLITICS (3). Comparative analysis of politics and government in Latin America, focusing on specific countries or issues. May be repeated once as topic changes. PRQ: At least junior standing, or POLS 381, or consent of department.

International Relations

285. INTRODUCTION TO INTERNATIONAL RELATIONS (3). Theories, models, and concepts commonly used to explain international relations with an emphasis on the use of these constructs to analyze contemporary international problems and issues.

380. AMERICAN FOREIGN POLICY (3). Examination of the substance of American foreign policy, with attention to issues such as presidential management of foreign affairs, international crises, or U.S. policy toward selected regions of the world. PRQ: At least sophomore standing. Recommended: POLS 285.

381. THE U.S. AND LATIN AMERICA (3). Evolution of U.S.-Latin American relations, the development of the inter-American system, and contemporary international issues in the Western Hemisphere. PRQ: At least sophomore standing.

382. U.S. FOREIGN POLICY MAKING (3). Examination of the formulation and implementation of past and present American foreign policy, with emphasis on the relative influence of domestic actors and processes. PRQ: At least junior standing. Recommended: POLS 285.

383. CHANGING WORLD POLITICAL ECONOMY (3). International political economy since World War II: relations among advanced industrialized states; interaction among developed and developing economies; and policy choices confronting the United States. PRQ: At least sophomore standing.

386. GLOBAL TERRORISM (3). Examines competing answers to basic questions about terrorism including: what is terrorism; why is terrorism increasing; what causes terrorism; and what can be done to diminish the incidences and destructiveness of terrorism? PRQ: At least sophomore standing. Recommended POLS 285.

387. EAST ASIA AND INTERNATIONAL POLITICS (3). Examination of international military and economic challenges facing China, Japan, Korea, Russia, and the United States. PRQ: At least sophomore standing.

388. U.S. NATIONAL SECURITY POLICY (3). Examination of contemporary American defense policy, with emphasis on a broad range of national and global security threats. Attention given to national interests and capabilities, international responsibilities, and selected policies and strategies. PRQ: At least junior standing.

480. INTERNATIONAL LAW AND ORGANIZATION (3). Principles of the international law of peace, war, and neutrality. The origins, structure, and functioning of the United Nations and its specialized agencies. Contemporary problems. PRQ: At least junior standing. Recommended: POLS 285.

483. RUSSIAN FOREIGN POLICY (3). Examination of contemporary Russian foreign policy, with emphasis on the determinants, objectives, and strategies. PRQ: At least junior standing. Recommended: POLS 366.

General

395. CONTEMPORARY TOPICS IN POLITICAL SCIENCE (3). Selected topics in the analysis and evaluation of political phenomena in a variety of settings. Topics vary each semester and include such concerns as political myths, revolution, biopolitics, imperialism, and utopian politics. May be repeated once as topic changes. PRQ: At least sophomore standing.

397H. HONORS SEMINAR IN POLITICAL SCIENCE (3). Preparing junior honors students to conduct research for, and write, their senior theses. PRQ: Junior standing and acceptance into departmental honors program.

490. INTERNSHIP IN POLITICAL SCIENCE (1 to 3). Admission upon written approval by the internship coordinator for the Department of Political Science. Credit awarded to qualified students upon completion of an internship experience related to the field and writing assignments. S/U grading.

493X. SEMINAR IN POLITICAL ECONOMY (3). *Crosslisted as ECON 493.*
A. Decision Making in the Public Sector
B. International Relations
C. Metropolitan Studies
D. Human Resources and Training Policy
Selected topics in political economy, offered jointly by the Departments of Political Science and Economics. Topics listed by semester. Each lettered topic may be taken once. PRQ: Consent of departments.

494. SENIOR SEMINAR IN POLITICAL SCIENCE (3). Advanced seminar in the general problems of political science related to such concepts as power, elites, interest groups, aggregation analysis, political culture and socialization, the nature of the nation-state system, and methods of survey research. PRQ: Senior standing and consent of department.

495. SEMINAR IN CURRENT PROBLEMS (3). Contemporary issues and policies in government and politics. May be repeated to a maximum of 6 semester hours. PRQ: At least junior standing.

496. INDEPENDENT STUDY IN POLITICAL SCIENCE (1 to 6). Special readings and topics in political science. Open only to junior and senior majors in political science with a GPA of 3.00 or above and 12 semester hours in political science. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

497. SMALL-GROUP STUDY IN POLITICAL SCIENCE (1). Small groups of participants in the Political Science/Pre-Law Public Service Residence Hall Program study topics under the guidance of faculty members. Open only to residents of the program. May be repeated to a maximum of 8 semester hours, but only 6 semester hours may be applied towards the major.

498. SEMINAR ABROAD (3 to 9). A foreign study course to be arranged with the department chair.

499H. SENIOR HONORS THESIS (1 to 3). Preparation of an honors thesis under the guidance of a faculty member. May be repeated to a maximum of 4 semester hours. PRQ: Senior standing, POLS 397H, and consent of department.

Political Science Faculty

Daniel R. Kempton, Ph.D., University of Illinois, associate professor, chair
Christopher M. Jones, Ph.D., Syracuse University, associate professor, assistant chair
Larry Arnhart, Ph.D., University of Chicago, professor
Andrea Bonnicksen, Ph.D., Washington State University, Presidential Research Professor
Barbara C. Burrell, Ph.D., University of Michigan, associate professor
Paul J. Culhane, Ph.D., Northwestern University, associate professor
Craig R. Ducat, Ph.D., University of Minnesota, Distinguished Teaching Professor, adjunct
Morton J. Frisch, Ph.D., Pennsylvania State University, adjunct professor
Gerald T. Gabris, Ph.D., University of Missouri, Presidential Teaching Professor
Gary D. Glenn, Ph.D., University of Chicago, Distinguished Teaching Professor
Lynn Kamenitsa, Ph.D., Indiana University, associate professor
Dwight Y. King, Ph.D., University of Chicago, professor

Paul J. Kleppner, Ph.D., University of Pittsburgh, Distinguished Research Professor, adjunct
Heidi O. Koenig, Ph.D., Syracuse University, adjunct associate professor
Lettie McSpadden, Ph.D., University of Wisconsin, adjunct professor
Donald G. Menzel, Ph.D., Pennsylvania State University, adjunct professor
Clark D. Neher, Ph.D., University of California, Los Angeles, Distinguished Teaching Professor, adjunct
James Ockey, Ph.D., Cornell University, assistant professor
Michael T. Peddle, Ph.D., Northwestern University, associate professor
John G. Peters, Ph.D., University of Illinois, professor
Bruce A. Rocheleau, Ph.D., University of Florida, professor
Irene S. Rubin, Ph.D., University of Chicago, professor
Gregory Schmidt, Ph.D., Cornell University, professor
Matthew Streb, Ph.D., Indiana University, assistant professor
Brendon Swedlow, Ph.D., University of California, Berkeley, assistant professor
M. Ladd Thomas, Ph.D., Tufts University, adjunct professor
Daniel H. Unger, Ph.D., University of California, Berkeley, associate professor
Y. K. Wang, Ph.D., University of Chicago, assistant professor
Artemus Ward, Ph.D., Syracuse University, assistant professor
Curtis H. Wood, Ph.D., University of Kansas, assistant professor
Mikel Wyckoff, Ph.D., University of Maryland, associate professor

Department of Psychology (PSYC)

The Department of Psychology offers the B.A. and B.S. degree with a major in psychology. Either program can be used to gain certification to teach social sciences at the junior and senior high school levels. The department also offers a minor in psychology which should be of interest to students majoring in many other areas in the university. A departmental honors program is offered for qualified majors. Successful completion of the program leads to graduation with honors in psychology.

The introductory course in psychology can be used by non-majors toward fulfilling the university's general education requirement in the social sciences area. A number of departmental courses are required of majors in other programs throughout the university.

Internship opportunities are available to psychology majors of upper-division standing in youth care agencies, community mental health centers and medical programs, law enforcement/court/legal offices, human resource/employment services, and other professions in conjunction with PSYC 489. Interested students may consult with their faculty adviser or with a faculty member closely associated with the appropriate field.

Major in Psychology (B.A. or B.S.)

Requirements in Department (35)

PSYC 102 - Introduction to Psychology (3)
PSYC 305 - Research Methods (3)
Two of the following (8)
- PSYC 410 - Experimental Psychology: Perception (4)
- PSYC 411 - Experimental Psychology: Conditioning and Learning (4)
- PSYC 412 - Experimental Psychology: Human Learning and Memory (4)
- PSYC 413 - Clinical Psychology Laboratory (4)
- PSYC 431 - Physiological Psychology (4)
- PSYC 433 - Social and Personality Laboratory (4)
- PSYC 464 - Developmental Psychology Laboratory (4)

Electives in psychology (21 hours) to include at least 15 hours selected from 300-400 level courses. PSYC 485 may be included in these 21 hours for no more than 3 semester hours of credit. (21)

Requirements outside Department (B.A., 3-16; B.S., 14-16)

For the B.A. degree
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
Fulfillment of foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree.")

For the B.S. degree
One of the following groups

Group 1
One of the following (4)
- CSCI 210 - Elementary Programming (4)
- CSCI 230 - Computer Programming in FORTRAN (4)
- CSCI 240 - Computer Programming in C++ (4)
- CSCI 250 - Computer Programming in COBOL (4)

*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4)

Group 2
One of the following (4)
- CSCI 210 - Elementary Programming (4)
- CSCI 230 - Computer Programming in FORTRAN (4)
- CSCI 240 - Computer Programming in C++ (4)
- CSCI 250 - Computer Programming in COBOL (4)

*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Group 3
MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4)
A two-semester laboratory sequence to be met by one of the following sequences (7-9)
- *BIOS 104 - General Biology (4), and BIOS 205T - Organismal Diversity (3), and BIOS 207 - Organismal Diversity Laboratory (1), BIOS 213 - Introductory Bacteriology (3), or BIOS 357 - Human Anatomy and Physiology (5)
- *CHEM 210T - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
- *CHEM 211T - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
- *PHYS 210 and *PHYS 211 - General Physics I and II (8)

Total Hours for a Major in Psychology: 38-51 (B.A.) OR 49-51 (B.S.)

Teacher Certification

Students who want to be certified to teach psychology/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in psychology.

Admission

Students are admitted to the certification program when they have

established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;

attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;

completed at least 6 semester hours of psychology at NIU and earned a minimum GPA of 3.00 in all psychology courses taken at the college/university level;

completed the core competency requirements in English and oral communication;

completed at least 20 clock hours of approved early clinical experiences; and

obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

* Available for general education credit.

Department Requirements

Students must complete the requirements for a degree in psychology. In addition, they must complete PSYC 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, PSYC 496X must be taken in the semester immediately prior to enrollment in student teaching.

Other Requirements

Students must complete HIST 400, Student Teaching (Secondary) in History/Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the Department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

The Psychology Honors Program, which is separate from the University Honors Program, provides a challenging educational experience for students of high academic promise and achievement in psychology. Eligible students will normally have achieved at least a 3.00 GPA overall and in psychology courses. Students should apply for admission as early as possible since the program requires specific course work. A letter addressed to the Psychology Honors Committee containing relevant academic information and a statement of interest in the program serve as an application.

Requirements

Completion of the psychology major requirements for the baccalaureate degree.

A cumulative GPA of at least 3.00 overall and 3.50 or above in psychology courses.

Completion of at least 6 of the required 15 semester hours of elective credit at the 300-400 level with honors. No more than 3 of these 6 hours may include PSYC 485, Individual Study in Psychology.

Completion of 6 hours of PSYC 499H.

Presentation of a satisfactory psychology honors thesis.

Minor in Psychology (21)

*PSYC 102 - Introduction to Psychology (3)
Electives in psychology with at least 12 semester hours from 300- and 400-level courses (18)

Six or more semester hours in the minor must be taken at NIU.

Course List

102. INTRODUCTION TO PSYCHOLOGY (3). Basic psycho-physiological principles of human behavior, including the roles of heredity, maturation, environment, behavioral development, sensory processes, perception, motivation, and emotions.

219. MENTAL HYGIENE (3). Analysis of behavioral and environmental factors promoting mental health. Development of skills for identifying symptoms of maladjustment. Consideration of methods providing for emotional outlets and emotional control. Cannot be applied towards a major in psychology but can be applied for a minor. Not used in major GPA calculation for psychology majors.

225. LIFESPAN DEVELOPMENT: CHILDHOOD THROUGH ADULTHOOD (3). Behavioral development from conception through adulthood. Emphasis on biological, motor, cognitive, social, and personality characteristics at various stages of development. PRQ: PSYC 102.

245. THINKING (3). The phenomenon of thinking with emphasis on psychological theories and empirical findings related to memory, problem solving, decision making, and reasoning. Classroom demonstrations and exercises to illustrate principles and help students to improve their critical thinking skills. PRQ: PSYC 102.

300. INTRODUCTION TO BRAIN AND BEHAVIOR (3). Introductory survey concerned with the relationship between the brain and a wide variety of behaviors, both normal and abnormal. Provides a fundamental understanding of how the brain controls and mediates behavior, and a foundation for more advanced courses in behavioral neuroscience. PRQ: At least sophomore standing and PSYC 102, or consent of department.

305. RESEARCH METHODS (3). Introduction to research methods and the design of experiments in psychology. Discussion of all aspects of an experiment, from the initial formulation of an hypothesis through the final report of results, using examples from a variety of problem areas in psychology. PRQ: At least sophomore standing, PSYC 102, and a grade of C or better in STAT 208, STAT 301, or STAT 350, or consent of department.

315. BEHAVIOR DISTURBANCES IN CHILDREN (3). Disturbances in children involving intellectual, emotional, and expressive behaviors as well as selected therapeutic procedures and their relationship to psychological theories and research. PRQ: At least sophomore standing and PSYC 102, or consent of department.

316. INTRODUCTION TO PSYCHOPATHOLOGY (3). Introduction to the study of "pathological" behavior. The development, maintenance, and treatment of problem behavior discussed from theoretical, empirical, and clinical perspectives. PRQ: At least sophomore standing and PSYC 102, or consent of department.

324. DEVELOPMENTAL CHILD PSYCHOLOGY (3). Introduction to questions, approaches, and empirical findings in the field of developmental psychology. Emphasis on the processes of psychological development during childhood, as illustrated within a broad range of psychological content domains. PRQ: At least sophomore standing and PSYC 102, or consent of department.

332. PERSONALITY (3). Consideration of basic factors in personality and the role of personality in the study of behavior. Discussion and critical examination of contemporary studies in personality, with emphasis on experimental evidence. PRQ: At least sophomore standing and PSYC 102, or consent of department.

345. COGNITIVE PSYCHOLOGY (3). Introduction to how a person attends to and gains information about the world, how that information is stored in and retrieved from memory, and how this knowledge is used in language and comprehension, problem solving, and thinking. PRQ: At least sophomore standing and PSYC 102, or consent of department.

351. INTRODUCTION TO PSYCHOLOGICAL TESTS (3). Includes group intelligence tests and personality and interest inventories, with emphasis on design, execution, and interpretation of testing in psychological situations. PRQ: At least sophomore standing, PSYC 102, and either STAT 301 or STAT 350; or consent of department.

360. MOTIVATION (3). Study of human and animal behavior as it is determined by motives and emotions. Analysis of primary and learned motivators in the context of contemporary research and theory, with emphasis on the relationship of motives to the reinforcement, punishment, and energizing of behavior. PRQ: At least sophomore standing and PSYC 102, or consent of department.

372. SOCIAL PSYCHOLOGY (3). Behavior in the context of social interaction, with emphasis on experimental findings. Includes such topics as interpersonal judgment and perception, social attraction, aggression, prejudice and social influence, including attitude formation and persuasion, conformity, and social modeling. PRQ: At least sophomore standing and PSYC 102, or consent of department.

400. PSYCHOLOGY OF LANGUAGE (3). Examination of cognitive, motor, and physiological processes involved in production and comprehension of spoken and written language are examined from a psychological perspective. Emphasis on issues, methods, and explanatory models in psychology relevant to the transmission of information via reading, writing, listening, and speaking. Topics include reader/text and listener/speaker characteristics, mental representations, memory, conversational interchanges, and pragmatics. PRQ: At least junior standing and either PSYC 245 or PSYC 345, or consent of department.

410. EXPERIMENTAL PSYCHOLOGY: PERCEPTION(4). Method and theory in the psychology of perception; objective study of the relationships between an organism's physical and behavioral environments. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 300 or PSYC 345; or consent of department.

411. EXPERIMENTAL PSYCHOLOGY: CONDITIONING AND LEARNING(4). Basic processes of learning with emphasis on Pavlovian and instrumental conditioning. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 300 or PSYC 345; or consent of department.

412. EXPERIMENTAL PSYCHOLOGY: HUMAN LEARNING AND MEMORY(4). Fundamental encoding, transfer, and memory processes in human behavior. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 245 or PSYC 345; or consent of department.

413. CLINICAL PSYCHOLOGY LABORATORY (4). Training in current research techniques used in the study of clinical psychology. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 315, or PSYC 316, or PSYC 332; or consent of department.

417. PRINCIPLES OF BEHAVIOR MODIFICATION (3). Introduction to the psychological principles, methods, and issues in behavior modification. Emphasis on theoretical and empirical foundations of various strategies for producing behavior change and on ethical issues involved in the use of behavioral techniques. PRQ: At least junior standing and either PSYC 315 or PSYC 316, or consent of department.

418. INTRODUCTION TO CLINICAL PSYCHOLOGY (3). Survey of the knowledge, activities, and methods of inquiry associated with clinical psychology; its relationships to other areas of psychology and other disciplines; and a sampling of problems and controversies within the area. PRQ: At least junior standing and either PSYC 315 or PSYC 316, or consent of department.

424. ADOLESCENT DEVELOPMENT (3). Behavioral development during the adolescent years. Emphasis on biological and physiological, learning and cognitive, and social and personality transitions at various stages of development within the family, peer group, educational/ school, and work contexts of adolescent life. PRQ: At least junior standing and PSYC 324, or consent of department.

425. ADULT DEVELOPMENT AND AGING (3). Behavioral development from early adulthood through old age. Emphasis on biological, motor, cognitive, social, and personality characteristics at various stages of development. PRQ: At least junior standing and PSYC 324, or consent of department.

426. THEORIES OF PERSONALITY (3). Systematic study of the theoretical contributions of major psychologists to basic understanding of the dynamics of human personality. PRQ: At least junior standing and either PSYC 332 or PSYC 372, or consent of department.

428. HISTORY OF PSYCHOLOGY (3). Review of the historical roots of the science of psychology and the development of the field to contemporary times. PRQ: At least junior standing and at least 3 semester hours of upper-division credit in psychology, or consent of department.

431. PHYSIOLOGICAL PSYCHOLOGY (4). *Crosslisted as BIOS 431X.* Understanding the physiological functioning of the body as it affects behavior. Emphasis on neurological factors involved. Lecture and laboratory. At least junior standing, PSYC 305, and either BIOS 104 or PSYC 300; or consent of department.

433. SOCIAL AND PERSONALITY LABORATORY (4). Training in current research techniques used in the study of social and personality psychology. Experiments conducted to study the effects of personality and social factors on behavior. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 332 or PSYC 372; or consent of department.

464. DEVELOPMENTAL PSYCHOLOGY LABORATORY (4). Training in current research techniques used in the study of developmental psychology. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 225 or PSYC 324; or consent of department.

465. ADVANCED DEVELOPMENTAL PSYCHOLOGY (3). Fundamental theories, issues, and concepts in developmental psychology are examined in depth and illustrated within one or more content areas, such as physical, cognitive, perceptual, language, personality, and/or social aspects of development. PRQ: At least junior standing and PSYC 324, or consent of department.

471. INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY (3). Contribution of psychology in theory, research, and practice to the understanding of such topics as employee selection, placement, and training, job satisfaction, work motivation and performance, problem solving and decision making, leadership and supervision, work design, and organizational development. PRQ: At least junior standing and either PSYC 351 or PSYC 372, or consent of department.

472. GROUP PROCESSES (3). Introductory survey of small group processes and collective interaction. Emphasis on empirical findings derived from laboratory experimentation. Topics include communication in groups, bargaining and coalition formation, cooperation and conflict, leadership, group pressures and influence, collective decision making, and group problem solving. PRQ: At least junior standing and either PSYC 332 or PSYC 372, or consent of department.

473. SOCIAL JUDGMENT (3). Examination of research and theory dealing with how people evaluate and form judgments of other people. Research dealing with judgments made both by individuals and by groups. In addition to critical study of basic judgment processes, addresses applied aspects of social judgment such as moral, clinical, and trial jury decisions. Not available for credit toward graduate degrees in psychology. PRQ: At least junior standing and PSYC 372, or consent of department.

474. PSYCHOLOGICAL BASIS OF SEXUALITY (3). Examination of human sexuality from a psychological perspective including sexual behavior and the motivation, cognitive processes, and affective responses underlying this behavior. Emphasis on understanding the empirical literature, methodology, and findings of current psychological research on human sexuality. PRQ: At least junior standing and either PSYC 316 or PSYC 332, or consent of department.

481. DRUGS AND BEHAVIOR (3). Basic techniques, current data, and interpretations from neurochemical, neuropharmacological, and behavioral approaches to the investigation of behaviorally active drugs. Some knowledge of the structure and functioning of the mammalian nervous system assumed. PRQ: At least junior standing and PSYC 300, or consent of department.

485. INDIVIDUAL STUDY IN PSYCHOLOGY (1 to 3). Qualified students interested in specific problems in psychology work with a faculty member in the department. May be repeated to a maximum of 6 semester hours, but only 3 semester hours may be applied toward a major or minor in psychology. PRQ: Consent of department.

489. COOPERATIVE EDUCATION/INTERNSHIP (3). Work in an authorized agency for at least 10 hours per week. Preparation of a written report or oral presentation describing the experience

required. Work experience must be approved by NIU's Cooperative Education/Internship Program. May be repeated once, but no more than 3 semester hours can be applied toward a major in psychology. S/U grading. PRQ: At least junior standing with a declared major in psychology, and consent of a faculty sponsor.

495. SEMINAR IN SPECIAL TOPICS (3). Topics announced. May be repeated once as topics change. PRQ: At least junior standing and at least 3 semester hours of upper-division credit in psychology, or consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

498H. HONORS INDEPENDENT STUDY (1 to 3). Intensive study of a selected topic in psychology as the capstone project in the university honors program. Open only to senior psychology majors currently admitted to the university honors program. Not available for credit for students in the departmental honors program. PRQ: Senior standing, 3 semester hours of elective credit at the 300-400 level in psychology with honors, admission to the university honors program, and consent of department.

499H. SENIOR HONORS RESEARCH THESIS (1 to 3). Individual study of a problem in psychology involving experimental or other scholarly work. May be repeated to a maximum of 6 semester hours but only 3 semester hours may be applied toward a major in psychology. PRQ: Senior standing, 3 semester hours of elective credit at the 300-400 level in psychology with honors, and consent of departmental honors committee.

Psychology Faculty

Charles E. Miller, Ph.D., University of Michigan, professor, chair
M. Anne Britt, Ph.D., University of Pittsburgh, associate professor
James V. Corwin, Ph.D., University of Kentucky, Presidential Research Professor
Michelle K. Demaray, Ph.D., University of Wisconsin, associate professor
Amanda M. Dunk, Ph.D., University of Wisconsin, Madison, assistant professor
Lisa M. Finkelstein, Ph.D., Tulane University, associate professor
Joseph E. Grush, Ph.D., University of Illinois, professor
Peter M. Gutiérrez, Ph.D., University of Michigan, associate professor
Elisa Krackow, Ph.D., State University of New York, Binghamton, assistant professor
Mary C. Lovejoy, Ph.D., University of Iowa, associate professor
Joseph P. Magliano, Ph.D., University of Memphis, associate professor
Christine K. Malecki, Ph.D., University of Wisconsin, associate professor
Elise F. Masur, Ph.D., University of Minnesota, professor
Leslie Matuszewich, Ph.D., University of Buffalo, assistant professor
Keith K. Millis, Ph.D., Memphis State University, professor
Joel S. Milner, Ph.D., Oklahoma State University, Distinguished Research Professor
Nina S. Mounts, Ph.D., University of Wisconsin, associate professor
George A. Neuman, Ph.D., Illinois Institute of Technology, associate professor
Holly K. Orcutt, State University of New York, Buffalo, associate professor
Christopher P. Parker, Ph.D., Rice University, associate professor
Bradford H. Pillow, Ph.D., Stanford University, associate professor
Laura D. Pittman, Ph.D., University of Connecticut, Storrs, assistant professor
Alan Rosenbaum, Ph.D., State University of New York, Stony Brook, professor
Brad J. Sagarin, Ph.D., Arizona State University, associate professor
Frederick M. Schwantes, Ph.D., University of Iowa, professor
John J. Skowronski, Ph.D., University of Iowa, professor
David P. Valentiner, Ph.D., University of Texas, associate professor
Gregory A. Waas, Ph.D., University of Wisconsin, Madison, associate professor
Douglas Wallace, Ph.D., Kent State University, assistant professor
Katja Wiemer-Hastings, Ph.D., University of Memphis, assistant professor
Kevin D. Wu, Ph.D., University of Iowa, assistant professor

Department of Sociology (SOCI)

Admission to the major and minor in the Department of Sociology is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section.

The Department of Sociology offers the B.A. and B.S. degree with a major in sociology with emphases in general sociology, criminology, sociology of health and aging, and applied sociology. The initial course requirements in all four emphases are the same, but the emphases differ. The emphasis in general sociology is primarily for students seeking teacher certification at the junior and senior high school levels. The emphasis in criminology is directed toward students preparing for careers in the criminal justice system and related fields. The emphasis in the sociology of health and aging is directed toward students preparing for social service careers in medical or gerontological settings. The emphasis in applied sociology is directed toward students interested in community or social service areas other than criminal justice, health, or aging.

A departmental honors program is available for outstanding students. The department also offers a minor in sociology, which should be of interest to students majoring in another social science program, in a program in family, consumer, and nutrition sciences, or in psychology, history, or philosophy.

Several of the department's courses can be used by non-majors toward fulfilling the social sciences area requirement in the university's general education program. Several of its courses are also recommended or required for majors in other programs, especially those in the College of Business and in the College of Health and Human Sciences. The department also participates in international study programs, in the University Honors Program, and in the interdisciplinary minors in black studies, environmental studies, gerontology, international studies, Latino/Latin American studies, public administration, Southeast Asian studies, urban studies, and women's studies.

Major in Sociology (B.A. or B.S.)

Emphasis 1. General Sociology

Requirements in Department (34)

SOCI 170 - Introduction to Sociology (3)
SOCI 280 - Foundations of Sociology (3)
SOCI 301 - Classical Sociological Theory (3)
SOCI 302 - Contemporary Sociological Theory (3)
SOCI 377A - Sociological Inquiry I (3)
SOCI 377B - Sociological Inquiry II (4)
Additional courses in sociology selected in consultation with an adviser[1] (15)

Requirements outside Department (B.A., 3-16; B.S., 11-14)

For the B.A. degree
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
One of the following groups (11-14)
CSCI 210 - Elementary Programming (4)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4),
OR
*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 1, General Sociology: 37-50 (B.A.) OR 45-48 (B.S.)

Emphasis 2. Criminology

Requirements in Department (37)

A. All of the following (25)
SOCI 170 - Introduction to Sociology (3)
SOCI 280 - Foundations of Sociology (3)
SOCI 288 - Criminology (3)
SOCI 289 - The Criminal Justice System (3)
SOCI 301 - Classical Sociological Theory (3)
SOCI 302 - Contemporary Sociological Theory (3)
SOCI 377A - Sociological Inquiry I (3)
SOCI 377B - Sociological Inquiry II (4)
B. Two of the following (6)
POLS 317 - Judicial Politics (3)
POLS 415 - Criminal Law (3)
SOCI 388 - Punishment and Corrections (3)
SOCI 390 - Internship in Sociology (3)
SOCI 484 - Society and Judicial Processes (3)
SOCI 486 - Police in a Democratic Society (3)
C. Two of the following (6)
PHIL 362 - Philosophy of Law (3)
SOCI 380 - Deviance in Society (3)
SOCI 382 - Law and Society (3)
SOCI 385 - Gender and Crime (3)
SOCI 488 - Juvenile Delinquency (3)
SOCI 492 - Comparative Criminology (3)

Requirements outside Department (B.A., 3-16; B.S., 11-14)

For the B.A. degree
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
One of the following groups (11-14)
CSCI 210 - Elementary Programming (4)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4),
OR
*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 2, Criminology: 40-53 (B.A.) OR 48-51 (B.S.)

Emphasis 3. Sociology of Health and Aging

Requirements in Department (34)

A. All of the following (28)
SOCI 170 - Introduction to Sociology (3)
SOCI 251 - Health, Aging, and Society (3)
SOCI 280 - Foundations of Sociology (3)
SOCI 301 - Classical Sociological Theory (3)
SOCI 302 - Contemporary Sociological Theory (3)
SOCI 377A - Sociological Inquiry I (3)
SOCI 377B - Sociological Inquiry II (4)
SOCI 451 - Medical Sociology (3)

* Available for general education credit.
[1] A maximum of 6 semester hours in related fields will be accepted with the advance written approval of the adviser.

SOCI 462 - Aging and Society (3)
B. Two of the following (6)
SOCI 366 - Sociology of Mental Health and Illness (3)
SOCI 390 - Internship in Sociology (3)
SOCI 460 - Social Structure and the Life Course (3)
SOCI 475 - Health Organizations and Delivery of Services (3)
SOCI 482 - Sociology of Death and Dying (3)

Requirements outside Department (B.A., 6-19; B.S., 14-17)

C. One of the following (3)[2]
*AHP 295 - Ecology of Health (3)
AHPH 485 - Principles of Health Planning (3)
ANTH 465 - Medical Anthropology (3)
FCNS 486 - Aging and the Family (3)
IDSP 465 - Issues in Gerontology (3)
PSYC 425 - Adult Development and Aging (3)

For the B.A. degree
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
One of the following groups (11-14)
CSCI 210 - Elementary Programming (4)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4),
OR
*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 3, Sociology of Health and Aging: 40-53 (B.A.) OR 48-51 (B.S.)

Emphasis 4. Applied Sociology

Requirements in Department (37-38)

A. All of the following (25)
SOCI 170 - Introduction to Sociology (3)
SOCI 270 - Social Problems (3)
SOCI 280 - Foundations of Sociology (3)
SOCI 301 - Classical Sociological Theory (3)
SOCI 302 - Contemporary Sociological Theory (3)
SOCI 377A - Sociological Inquiry I (3)
SOCI 377B - Sociological Inquiry II (4)
SOCI 390 - Internship in Sociology (3),
OR SOCI 392 - Organizing for Social Action (3)
B. Two of the following (6-7)
SOCI 351 - The Urban Community (3)
SOCI 357 - The Sociology of Gender (3)
SOCI 361 - Race and Ethnic Relations (3)
SOCI 392 - Organizing for Social Action (3) (if not used for part A)
SOCI 450 - Social Inequality (3)
SOCI 454 - Racial and Ethnic Minority Families (3)
SOCI 461 - Intergroup Relations (3)
SOCI 476 - Seminar in Sociological Research Methods (4)
C. Two of the following (6)
SOCI 289 - The Criminal Justice System (3)
SOCI 290 - Fields of Social Work (3)
SOCI 354 - Families and Social Change (3)
SOCI 366 - Sociology of Mental Health and Illness (3)
SOCI 375 - Organizations in Modern Society (3)
SOCI 390 - Internship in Sociology (3) (if not used for part A)
SOCI 475 - Health Organizations and Delivery of Services (3)

Requirements outside Department (B.A., 3-16; B.S., 11-14)

For the B.A. degree
*STAT 208 - Basic Statistics (3),
OR STAT 301 - Elementary Statistics (4)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

For the B.S. degree
One of the following groups (11-14)
CSCI 210 - Elementary Programming (4)
*MATH 210 - Finite Mathematics (3)
*MATH 211 - Calculus for Business and Social Science (3)
STAT 301 - Elementary Statistics (4),
OR
*MATH 229 and MATH 230 - Calculus I and II (8)
STAT 350 - Introduction to Probability and Statistics (3)

Total Hours for Emphasis 4, Applied Sociology: 40-54 (B.A.) OR 48-52 (B.S.)

Teacher Certification

Students who want to be certified to teach sociology/social sciences in grades 6-12 must declare their intention to do so with the office of teacher certification in the Department of History at the earliest possible opportunity. Certification involves significant requirements in addition to the completion of a degree in sociology.

Admission

Students are admitted to the certification program when they have

established a file with the Department of History's office of teacher certification and completed satisfactory reviews of progress each semester after establishment of the file;

attained junior standing and completed at least 12 semester hours at NIU with a minimum GPA of 2.75;

completed at least 6 semester hours of sociology at NIU and earned a minimum GPA of 3.00 in all sociology courses taken at the college/university level;

completed the core competency requirements in English and oral communication;

completed at least 20 clock hours of approved early clinical experiences; and

obtained approval from the Department of History's office of teacher certification.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the Department of History's office of teacher certification.

Department Requirements

Students must complete the requirements for a degree in sociology, emphasis in general sociology. In addition, they must complete SOCI 496X, History and Social Science Instruction in Grades 6-12. Except in unusual circumstances, SOCI 496X must be taken in the semester immediately prior to enrollment in student teaching.

Other Requirements

Students must complete HIST 400, Student Teaching in History/Social Sciences in Grades 6-12. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

Students must complete the minimum requirements for teaching endorsements in both U.S. history (8 semester hours) and world history (8 semester hours).

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* Available for general education credit.
[1] A maximum of 6 semester hours in related fields will be accepted with the advance written approval of the adviser.
[2] Or a course selected in consultation with a department adviser.

Illinois requires 100 clock hours of substantial, varied, and sequential clinical experiences prior to student teaching. Students must obtain permission from the Department of History's office of teacher certification for enrollment in these experiences.

Students must complete course work in human development and learning, techniques of assessment, foundations of education, and integrating exceptional students into the regular classroom. Students should consult with the Department of History's office of teacher certification to determine which courses are approved for satisfying this requirement.

Degree with Honors

To be eligible for a degree with honors, students must have at least a 3.50 GPA in their sociology courses and be recommended by faculty in the department.

The degree with honors will be awarded to majors who maintain a cumulative GPA of at least 3.25 and a 3.50 GPA or above in sociology, and successfully complete at least 12 semester hours of sociology honors work (of which 6 hours must be SOCI 490H, Senior Thesis).

Students who plan the senior honors thesis in sociology should take at the honors level either SOCI 377A or SOCI 377B, Sociological Inquiry I or II, and a course in their field of sociology chosen in consultation with their adviser.

Details concerning application for the degree with honors in sociology can be obtained from the department office, Zulauf 815.

Minor in Sociology (18-19)

*SOCI 170 - Introduction to Sociology (3)
SOCI 280 - Foundations of Sociology (3)
SOCI 301 - Classical Sociological Theory (3),
  OR SOCI 302 - Contemporary Sociological Theory (3)
SOCI 377A - Sociological Inquiry I (3),
  OR SOCI 377B - Sociological Inquiry II (4)
A minimum of 6 semester hours of electives in sociology chosen in consultation with faculty adviser.

Six or more semester hours in the minor must be taken at NIU.

Course List

170. INTRODUCTION TO SOCIOLOGY (3). Basic survey of major substantive areas within sociology including key contributions to our understanding of the complex social world. Concepts and methods used by sociologists.

250. CONTEMPORARY SOCIAL INSTITUTIONS (3). Examination of the continuity, interrelationships, and change in social organization and institutions in American and other societies.

251. HEALTH, AGING, AND SOCIETY (3). Examination of health and medical care throughout the life span, with emphasis on older adults. Topics include the cumulative effects of health behavior and the social organization of medical services.

260. INTRODUCTION TO SOCIAL PSYCHOLOGY (3). How people are socialized in terms of the norms and values of their societies and how norms and values influence societal change. Introduces students to the basic research and methods of social psychological inquiry.

270. SOCIAL PROBLEMS (3). Why social problems occur and how society can work toward correcting them. Exploration of how different value premises and social theories lead to distinctive ways of addressing social problems. Issues such as poverty, crime, homelessness, intergroup conflicts, and sexual identity discrimination provide case materials for these explorations. Use of this approach to examine underlying structural problems such as economic restructuring, the overall health and aging of the population, and urban change and decline.

280. FOUNDATIONS OF SOCIOLOGY (3). Fundamentals of theory, methods, and scholarly writing as they apply to a sociological perspective. PRQ: SOCI 170 or consent of department.

288. CRIMINOLOGY (3). Examination of the nature of crime and delinquency, crime statistics, and criminal behavior. Emphasis on causes and theories of crime. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270.

289. THE CRIMINAL JUSTICE SYSTEM (3). Overview of the relationships among the system's parts, including law, police, courts, prisons, and other agencies of coercive control. Examination of the flow of clients through the system, and relationships of the system to external institutions and social influences. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270.

290. FIELDS OF SOCIAL WORK (3). Fields and opportunities of social work in public and in private social agencies. Descriptive comparison of the types of social work, including case work and group work. Visits to selected social agencies.

301. CLASSICAL SOCIOLOGICAL THEORY (3). Examination of the major theorists and varied approaches to social phenomena from the 19th and 20th centuries that gave rise to the discipline of sociology. PRQ: SOCI 280 or consent of department.

302. CONTEMPORARY SOCIOLOGICAL THEORY (3). Examination of contemporary sociological theories and theorists, with special attention paid to the development of theory from the mid-20th century onward. Focus given to the way major issues facing contemporary society relate to changes in the intellectual enterprise of sociology. PRQ: SOCI 301 or consent of department.

351. THE URBAN COMMUNITY (3). Growth of cities; urban structures and urban interaction; influence of demographic factors and social change on urban forms; social problems and planning in urban areas. PRQ: An introductory course in social science or consent of department.

352. POPULATION (3). Structure and characteristics: fertility, mortality, morbidity, migration, and change; techniques of analysis; discussion of populations, family planning, and other policies of developing and developed countries. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

354. FAMILIES AND SOCIAL CHANGE (3). Introduction to family sociological and historical research, focusing on the diversity and adaptability of families in changing societies. Emphasis on how large social trends and forces such as economic transitions, governmental policies, and societal values and beliefs affect families as units and family members as individuals. Attention given to understanding the dynamic social construction of gender within and outside of families. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

355. SOCIOLOGY OF RELIGION (3). Development of religious groups and institutions; cultural variation in religious beliefs and behavior; the sectarian society and the denomination in relation to social structure and social change. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

357. THE SOCIOLOGY OF GENDER (3). Introduction to the current body of theory and research on gender from a critical social science perspective. Evaluates differences between biological maleness and femaleness and the social construction of modern gender identity. Emphasis on everyday processes of gender, including experiences of diverse populations across a range of social institutions. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

359. INDUSTRIAL SOCIOLOGY (3). Analysis of social roles and relationships within the occupational structure; formal and informal groups and organizations in industry; the relation of industrial organization to other aspects of the community. PRQ: An introductory course in social science or consent of department.

361. RACE AND ETHNIC RELATIONS (3). Analysis of the social and cultural patterns that structure the lives of ethnic and racial groupings in American society; impact of social change and conflict upon minority-majority relations; present trends in ethnic/racial identity and identity crises of selected ethnic and racial groups. PRQ: SOCI 170 or SOCI 270, or consent of department.

363. SOCIOLOGY OF THE MILITARY (3). Analysis of the impact of military institutions and war upon nations and international relations.

Examination of professional and organizational aspects of military institutions and their relationships to civilian society. PRQ: An introductory course in social science or consent of department.

366. SOCIOLOGY OF MENTAL HEALTH AND ILLNESS (3). Examination of the development and distribution of mental health and illness, particularly in the United States. Emphasis on the social factors in the origination of and reaction to stress and mental illness as well as the consequences of these to social systems. PRQ: 6 semester hours of sociology or consent of department. Recommended: SOCI 377A or SOCI 377B.

370. HISTORY OF SOCIAL THOUGHT (3). Survey of Greco-Roman, medieval, and modern philosophies leading to the origin of sociology in the 19th century. Analysis of the social and political ideas of selected thinkers, such as Plato, Aristotle, Aquinas, Hobbes, and Marx, stressing both continuities and discontinuities of their contributions with modern sociology. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270.

375. ORGANIZATIONS IN MODERN SOCIETY (3). Application of various sociological theories in explaining structures of organizations and behaviors of individuals within organizations. Comparisons between types of organizations–schools, administrative bureaucracies, social service, volunteer, and business. Examples drawn from both American and non-American settings. PRQ: An introductory course in social science or consent of department. Recommended: SOCI 377A or SOCI 377B.

377A. SOCIOLOGICAL INQUIRY I (3). The logic, philosophy, and ethics of scientific inquiry applied to understanding social phenomena. An introduction to ethnographic methods, including techniques of field observation, focus groups, in-depth interviewing, and comparison of methods. Practice in grounded theory and other qualitative methods of data analysis. Laboratory experience in techniques of information searches, electronic communication, and organizing observations. PRQ: SOCI 280 or consent of department.

377B. SOCIOLOGICAL INQUIRY II (4). Review of the logic, philosophy, and ethics of scientific inquiry. Definition and construction of variables. Introduction to hypothesis construction and testing, sampling techniques, experiment design, survey methods, quantitative data analysis, and comparison of methods. Practice in using data sets to investigate analytic questions. Laboratory experience in techniques of data management, descriptive and inferential analysis, and model testing. PRQ: SOCI 280 or consent of department. STAT 208 or STAT 301 or STAT 350 or UBUS 223.

379. COLLECTIVE BEHAVIOR (3). Social behavior that emerges in unstructured situations: mobs, panic, fads and fashions, riots, political and nonpolitical social movements, revolts and revolutions. PRQ: SOCI 260 or consent of department.

380. DEVIANCE IN SOCIETY (3). Social deviance as a concept. The process of becoming a deviant. The individual deviant, the deviant subculture and its impact on society. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

382. LAW AND SOCIETY (3). The basis for the functions of law and its relationship to social control. Theories of the formulation of laws and their relationship to social and political structures. Patterns of law enforcement, including police and judicial behavior, and the relationship between public opinion and law enactment and enforcement. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270.

385. GENDER AND CRIME (3). Relationships between gender and crime, internationally and nationally. Trends in female and male crime and victimization; the treatment of women and men in criminal justice systems. May include visits to appropriate agencies. PRQ: SOCI 170 or SOCI 288.

388. PUNISHMENT AND CORRECTIONS (3). History of punishment and corrections, with emphasis on the administration and functions of prisons, including custody, institutional programs, and inmate subcultures. Examination of the alternatives to incarceration, including probation and parole. May include visits to adult prisons. PRQ: SOCI 289.

390. INTERNSHIP IN SOCIOLOGY (3). Work as an intern in an agency engaged in activities related to one of the emphases in sociology. Readings and the preparation of a paper under the supervision of a faculty member in the department. May be repeated once, but no more than 3 hours of credit may be applied toward the major. S/U grading. PRQ: Junior or senior standing and consent of department.

392. ORGANIZING FOR SOCIAL ACTION (3). Social problem analysis and organizing skills for societal change. Approaches to solving social problems other than those encompassed within conventional social, economic, and governmental programs. Strategies of community organizations and social protest movements. PRQ: An introductory course in social science or consent of department.

450. SOCIAL INEQUALITY (3). Causes and consequences of inequality; economic, political, ethnic, and power dimensions; sources of conflict and class behavior; analysis and measurement of social stratification and mobility. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

451. MEDICAL SOCIOLOGY (3). Introductory examination and comparison of organizational structures and social roles within medical institutions. Attention given to sociological perspectives for understanding antecedents and consequences of mental and physical health problems and how medical institutions relate to other institutions in society. PRQ: SOCI 250 or SOCI 251, or consent of department.

452. PEACE AND SOCIAL JUSTICE (3). Examination of the contemporary and historical forms of peace and social justice from the sociological perspective. Analysis of the nature, origins, and types of social conflict and violence–ranging from the interpersonal to the international. Examination of the social and cultural sources of war and peace; the process and conditions for the peaceful resolution of conflicts; peacemaking as a form of everyday life; and social justice as the foundation for a peaceful society. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

453. SOCIOLOGY OF EDUCATION (3). Relationship of the educational system to the social structure; changing function of education in an advanced industrial society; impact of education on technological changes and social mobility; comparison of systems in various cultures. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

454. RACIAL AND ETHNIC MINORITY FAMILIES (3). Examination and comparison of historical colonization, immigration, and assimilation patterns of minority racial/ethnic groups in our society, focusing on the diversity of family life and gender relations within these communities. Attention given to institutionalized discrimination within the United States and the adaptive responses of minority families as they attempt to retain distinct cultural identities as well as access the American opportunity structure. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department. Recommended: SOCI 354.

455. ENVIRONMENTAL SOCIOLOGY (3). Relationship of the physical environment ("natural" and "built") to human behavior and social structure. Topics include population and urbanization, technological development, energy resources, housing, architectural design, natural disasters, occupational health and safety, industrial waste and pollution, and changes in agricultural production. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

457. FAMILIES IN GLOBAL PERSPECTIVE (3). Examination and comparison of family institutions in selected societies, focusing on the impact of globalization on traditional family organization, gender roles within family and community, and modes of household production. Attention given to influences of modernization efforts on the status of women and children, the family division of labor, and tensions between family household economics and wage labor in the global market. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department. Recommended: SOCI 354.

458. OCCUPATIONS IN THE SOCIAL STRUCTURE (3). Cultural definitions of work; the concepts of career and mobility; occupational choice theories; consequences of occupational specialization for social integration. Problems of disengagement from work. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

459. POLITICAL SOCIOLOGY (3). Relationship between political and social structures with emphasis on the concepts of power, ideology, elites, class, and politics. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

460. SOCIAL STRUCTURE AND THE LIFE COURSE (3). Aging as a life-long process of development through socially structured, historically conditioned stages. Topics include role transitions, intergenerational relations, and age norms. Emphasis on stages prior to old age. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

461. INTERGROUP RELATIONS (3). Analysis and exposition of cultural and social-psychological influences underlying relations among racial, ethnic, and other minority and majority groups. Emphasis on problems of prejudice and discrimination, and the promotion of harmonious intergroup relations. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

462. AGING AND SOCIETY (3). Interpersonal, structural, and cultural aspects of age and aging. Emphasizes old age. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

463. TOPICS IN SOCIAL PSYCHOLOGY (3). Treatment of recent developments in social psychology. Possible topics include social influence processes; attitude formation and change; leadership; group dynamics; personality in social structures; person perception and attribution processes. Topics announced in the *Schedule of Classes*. PRQ: SOCI 260 or consent of department.

475. HEALTH ORGANIZATIONS AND DELIVERY OF SERVICES (3). Social structure of hospitals, public health, and ambulatory care settings. Comparison of health care systems in U.S. and selected other nations; differences in financing, utilization, staffing, and relations with other social institutions. PRQ: SOCI 250 or SOCI 251, or consent of department.

476. SEMINAR IN SOCIOLOGICAL RESEARCH METHODS(4).
A. Survey Methods
B. Experimental Methods
D. Quantitative Methods
E. Field Methods
M. Multi-methods
N. Evaluation Research Methods
May be repeated to a maximum of 8 semester hours as topic changes. PRQ: SOCI 377A or SOCI 377B; SOCI 473; and STAT 208 or STAT 301; or consent of department.

482. SOCIOLOGY OF DEATH AND DYING (3). Systematic study of the last stage of the life cycle. How people cope with various forms of death, the bereavement process, and growing old alone. The social organization of dying and the treatment of death in the hospital setting. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

484. SOCIETY AND JUDICIAL PROCESSES (3). Social factors affecting definition and application of criminal adjudication, especially problems in theory and practice of justice. Social foundations of criminal and police procedures. PRQ: SOCI 289 or consent of department.

486. POLICE IN A DEMOCRATIC SOCIETY (3). Examination of the police, their organization, and their functions with attention to political and social factors that affect their activities. Police relations with the community and particularly with minority groups; the problems of brutality, corruption, and political involvement. PRQ: SOCI 289 or consent of department.

488. JUVENILE DELINQUENCY (3). Social and psychological factors in delinquent behavior; causation, prevention, and rehabilitation; the role of community agencies; the juvenile court. May include visits to juvenile correctional agencies. PRQ: SOCI 288 or consent of department.

490. INDEPENDENT STUDY IN SOCIOLOGY (1 to 3). Special readings and topics in sociology. Open only to senior majors in sociology with a GPA of 3.00 or higher. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

492. COMPARATIVE CRIMINOLOGY (3). Historical and comparative analysis of crime and the criminal justice system in Europe, the United States, underdeveloped countries, and socialist societies. PRQ: SOCI 288 and SOCI 289, or consent of department.

495. PROSEMINAR IN SOCIOLOGY (3). Selected topics from major fields of sociology such as social psychology, social organization, social disorganization, comparative analysis, theory, methods of research, health and aging, and criminology. May be repeated to a maximum of 6 semester hours as the topic changes. PRQ: Consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION IN GRADES 6-12 (3). *Crosslisted as HIST 496.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school levels. PRQ: Admission to the history or social science teacher certification program and permission of Department of History's office of teacher certification.

Sociology Faculty

Kay B. Forest, Ph.D., Cornell University, associate professor, chair
Abu B. Bah, Ph.D., New School for Social Research, assistant professor
Keri B. Burchfield, M.A., Pennsylvania State University, assistant professor
Charles L. Cappell, Ph.D., University of Chicago, associate professor
Kerry O. Ferris, Ph.D., University of California at Los Angeles, assistant professor
Carla D. Goar, Ph.D., Texas A&M University, assistant professor
Adam B. King, Ph.D., Indiana University, assistant professor
George A. Kourvetaris, Ph.D., Northwestern University, professor
David F. Luckenbill, Ph.D., University of California, Santa Barbara, professor
Fred E. Markowitz, Ph.D., State University of New York at Albany, associate professor
Chet E. Meeks, Ph.D., State University of New York at Albany, assistant professor
J. Kirk Miller, Ph.D., North Carolina State University, assistant professor
W. William Minor, Ph.D., Florida State University, associate professor
Robin D. Moremen, Ph.D., Yale University, associate professor
Kristen A. Myers, Ph.D., North Carolina State University, associate professor
Kei Nomaguchi, Ph.D., University of Maryland, assistant professor
Deirdre A. Oakley, Ph.D., State University of New York at Albany, assistant professor
Diane Rodgers, Ph.D., University of Missouri, Columbia, assistant professor
Jim Thomas, Ph.D., Michigan State University, Presidential Teaching Professor

College of Visual and Performing Arts

Harold Kafer, Ph.D., dean
Richard T. Holly, M.M., associate dean

The schools of the College of Visual and Performing Arts offer baccalaureate programs leading to the degrees Bachelor of Arts (B.A.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.M.), and Bachelor of Science in Education (B.S.Ed.). The College of Visual and Performing Arts offers a contract major leading to the degree Bachelor of Arts (B.A.) or Bachelor of General Studies (B.G.S.).

School Names and Undergraduate Programs Offered

School of Art
B.A. in art
B.A. in art history
B.F.A. in studio art
B.S.Ed. in art education

School of Music
B.A. in music
B.M. in music

School of Theatre and Dance
B.A. in theatre studies
B.F.A. in theatre arts

Contract Major

Requirements for B.A. Contract Major

The College of Visual and Performing Arts also offers students the opportunity to construct individualized programs of study culminating in the degree Bachelor of Arts. The policies and procedures governing this program are identical to those outlined below for the degree Bachelor of General Studies, Contract Major. The essential differences between the two opportunities for contract majors are that the more traditional B.A. degree is better understood outside of the university by prospective employers and by graduate schools, and that the B.A. degree requires demonstrated competence in a foreign language. Students whose academic interests include foreign languages or whose programmatic goals would be enhanced by such study are encouraged to pursue their contract majors under the B.A. degree. (Attention is directed to the section of the catalog entitled “Other Graduation Requirements” and the heading “Foreign Language Requirement for the B.A. degree.”)

Requirements for B.G.S. Contract Major

The College of Visual and Performing Arts offers students the opportunity of constructing individualized programs of study which are different from the university’s regular major and minor programs. Such an individualized course of study, termed a contract major, utilizes existing university courses and leads to the degree Bachelor of General Studies (B.G.S.). To receive the degree, a student must satisfy all university graduation requirements. The requirement of the contract major replaces the requirement of a regular departmental major. (See “University Graduation Requirements.”) The student interested in pursuing a contract major should discuss the matter with an adviser in the college offering the majority of the academic work proposed for inclusion in the program.

The contract major program allows a student with unusual and well defined academic interests to design a major with the advice of a faculty sponsor. The program must be logically structured around a meaningful and interesting theme or topic. Program proposals should be submitted to the associate dean of the College of Visual and Performing Arts and must be approved by the College Contract Major Committee.

The student who wishes to propose a contract major must

- have a cumulative GPA of at least 2.50.
- justify the new curriculum and define the goal to be achieved.
- design a multidisciplinary program that may be accommodated within existing university resources and facilities. (The program may include internships, independent study, or special projects up to a maximum of 12 semester hours.)
- include in the program at least 50 semester hours of course work comprising courses basic to the area of study. No more than 36 semester hours should be taken in any one disciplinary area.
- earn at least 30 semester hours of the contract major program in upper-division courses.

A student who completes an approved contract major and all other graduation requirements will receive the degree Bachelor of General Studies with a contract major in _____ (the theme specified in the contract).

Examples of contract themes that have been proposed include musical theatre, audio engineering technology, photography, scientific illustration, arts management, and art therapy.

NOTE: Because it is an innovative program, the degree Bachelor of General Studies is not as well understood outside the university as traditional baccalaureate degrees. Students earning this degree may be required to convince prospective employers or graduate schools that the degree will enable them to succeed in a particular job or a future educational endeavor.

School of Art (ART, ART-)

Admission to the area of study in visual communication under the B.F.A. in studio art is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

Requirements for All Majors

The School of Art reserves the privilege of requiring a portfolio review to determine a student's retention in a degree program or emphasis. (See B.F.A. emphases 1-3.)

The School of Art also reserves the right to require a portfolio examination if there is doubt about the acceptance of transfer credits (in lieu of particular courses in the major.)

To qualify for graduation, transfer students must take at least 15 semester hours of courses designated in their chosen emphasis in the School of Art at NIU.

Recommendation

It is recommended that students confer regularly with their advisers in order to balance studio and general education requirements. In general, students will find it difficult to carry more than three studio art classes in one semester.

Major in Art Education (B.S.Ed.)

Track 1. Teacher Certification[1]

This track leads to a license to teach in the public schools of the state of Illinois.

Requirements in School (74)

ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTS 200 - Beginning Life Drawing (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ARTE 342 - Introduction to Art Education: Content and Clinical Experience at the Elementary Level (3)
ARTE 344 - Resources and Methods in Art Education: Content and Clinical Experience at the Middle Level (3)
ARTE 345 - Curriculum Development in Art Education: Content and Clinical Experience at the High School Level (3)
ARTE 463 - Application of Aesthetics, Art History, and Criticism in Art Education (3)
One of the following pairs of courses[2] (6)
  ARTS 300 - Intermediate Drawing (3), and ARTS 301 - Drawing Composition and Techniques (3)
  ARTS 321 - Watercolor Painting I (3), and ARTS 322 - Watercolor Painting II (3)
  ARTS 323 - Painting I (3), and ARTS 324 - Painting II (3)
  ARTS 327 - Illustration I (3), and ARTS 328 - Illustration II (3)
  ARTS 330 - Introduction to Printmaking (3), and ARTS 331 - Intermediate Printmaking: Lithography (3)
  ARTS 330 - Introduction to Printmaking (3), and ARTS 332 - Intermediate Printmaking: Intaglio and Relief (3)
  ARTS 330 - Introduction to Printmaking (3), and ARTS 333 - Intermediate Printmaking: Serigraphy (3)
  ARTS 341 - Fundamentals of Ceramics (3), and ARTS 346A - Hand-Building Ceramics (3)
  ARTS 341 - Fundamentals of Ceramics (3), and ARTS 346B - Wheel-Throwing Ceramics (3)
  ARTS 351 - Beginning Metalwork and Jewelry (3), and ARTS 352 - Intermediate Metalwork and Jewelry (3)
  ARTS 361 - Beginning Sculpture I (3), and ARTS 362 - Beginning Sculpture II (3)
  ARTS 368 - Papermaking (3), and ARTS 470D - Intermediate/Advanced Fiber Studio: Papermaking (3)
  ARTS 371 - Weaving (3), and ARTS 470A - Intermediate/Advanced Fiber Studio: Weaving (3)
  ARTS 374 - 3-D Forms in Fiber (3), and ARTS 470C - Intermediate/Advanced Fiber Studio: 3-D Forms in Fiber (3),
  OR any two of the following
    ARTS 368 - Papermaking (3)
    ARTS 371 - Weaving (3)
    ARTS 372 - Surface Exploration of Fabric (3)
    ARTS 374 - 3-D Forms in Fiber (3)
One of the following[2] (3)
  ARTS 321 - Watercolor Painting I (3)
  ARTS 323 - Painting I (3)
  ARTS 330 - Introduction to Printmaking (3)
One of the following[2] (3)
  ARTS 341 - Fundamentals of Ceramics (3)
  ARTS 368 - Papermaking (3)
  ARTS 371 - Weaving (3)
  ARTS 372 - Surface Exploration of Fabric (3)
  ARTS 374 - 3-D Forms in Fiber (3)
One of the following[2] (3)
  ARTS 300 - Intermediate Drawing (3)
  ARTS 327 - Illustration I (3)
One of the following[2] (3)
  ARTS 351 - Beginning Metalwork and Jewelry (3)
  ARTS 361 - Beginning Sculpture I (3)
A 300- or 400-level art history course (3)
ARTE 479 - Art for Special Needs Populations (3),
  OR TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)
ARTE 482 - Clinical Experiences (2)
ARTE 488A - Student Teaching in Elementary Art (6)
ARTE 488B - Student Teaching in Secondary Art (6)

Requirements outside School (12)

Depending on the courses selected, the multicultural requirement may also be applied toward general education requirements.

*EPFE 201 - Education as an Agent for Change (3),
  OR *IDSP 211 - Educating for Cultural Sensitivity (3)
EPFE 400 - Foundations of Education (3),
  OR EPFE 410 - Philosophy of Education (3)
EPS 405 - Issues in Human Development in the Elementary Through High School Years (3)
ETR 440 - Secondary Classroom Assessment (3),
  OR ETR 430 - Tests and Measurements (Elementary) (3)

* Available for general education credit.
[1] Students with an undergraduate degree must be admitted to the M.S. program in art with a specialization in art education to enter the certification program.
[2] Students must complete 18 semester hours in these five categories with no repetition of courses

Special Requirements

Students must receive a grade of C or better in ARTE 342, ARTE 344, ARTE 345, and ARTE 463. Students must have a minimum 2.75 GPA in all NIU and transfer courses to enroll in Art Education courses. They must have a minium 2.50 GPA in all NIU courses to obtain a teaching certificate. These standards apply to all art education majors and initial certification candidates.

Students who fall below a required GPA may appeal in writing for one probationary semester to the chair of the art education division.

Students must present an art education entrance portfolio consisting of studio work and appropriate art education materials to the art education faculty before the completion of ARTE 342 and pass the portfolio review for admission into the certification program. Students must submit an exit portfolio during the semester before student teaching and pass the exit review in order to be approved for student teaching.

To gain admission into the certification program, students must successfully complete the Illinois Test of Basic Skills and the criminal background check required for certification (prior to ARTE 342), pass the entrance portfolio review, and have achieved a grade of at least C in ARTE 342. Also see "Teacher Certification Requirements."

Total Hours for a Major in Art Education, Track 1: 86

Track 2. Museum and Community Art Education

This track prepares students to develop and teach art-education programs in community-based, non-school settings, including art museums, art centers, and community cultural centers, with students of mixed ages and backgrounds. It provides a broad base of skills in cultural history and program development; it does not lead to certification to teach in public schools. Students may apply for admission to the museum and community art education track after completing 30 semester hours of college-level course work, including a minimum of 12 semester hours in art courses with no grade lower than a C, an overall minimum 2.50 GPA, and minimum computer competency in word-processing and page layout demonstrated through a special portfolio.

Requirements in School (62-71)

ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTE 342 - Introduction to Art Education: Content and Clinical Experience at the Elementary Level (3)
ARTE 344 - Resources and Methods in Art Education: Content and Clinical Experience at the Middle Level (3)
ART 457 - Museum Education (3)
ARTE 463 - Application of Aesthetics, Art History, and Criticism in Art Education (3)
ART 465 - Introduction to Museum Studies (3)
ARTE 480 - Alternative Teaching Experiences (3 to 12)
ARTE 482 - Clinical Experiences (2)
Course work from the following ARTH 291, ARTH 292, ARTH 293, or ARTH 294 (6)
Studio courses from the following with consent of adviser (12)
- At least one of the following (3-9)
  - ARTS 200 - Beginning Life Drawing (3)
  - ARTS 330 - Introduction to Printmaking (3)
  - ARTS 321 - Watercolor Painting I (3), or ARTS 323 - Painting I (3)
  - ARTD 273 - Image/Text Fundamentals (3), or ARTD 275 - Introduction to Time Arts (3)
  - ARTD 313 - Beginning Photography (3), or ARTD 413 - Intermediate Photography (3)
- And at least one of the following (3-9)
  - ARTS 371 - Weaving (3), or ARTS 372 - Surface Exploration of Fabric (3), or ARTS 374 - 3-D Forms in Fiber (3)
  - ARTS 341 - Fundamentals of Ceramics (3), or ARTS 346A - Hand-Building Ceramics (3)
  - ARTS 361 - Beginning Sculpture I (3)

Additional art history courses with consent of adviser (12)
Course work outside school with consent of adviser (18)

Special Requirements

Students must design a program of required and elective courses, with a faculty adviser, that represents a logical and unified whole consistent with the student's career objectives; complete a minimum of 36 semester hours of art courses at the 300/400 level; maintain a minimum 2.50 overall GPA; maintain a minimum 3.00 GPA in art education courses, with a grade of C or better in all art courses counted toward the program; pass a portfolio review of studio work.

Total Hours for a Major in Art Education, Track 2: 80-89

Major in Art History (B.A.)

Requirements in School (36)

ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ARTH 294 - Art History Survey IV: Arts of the East (3)
ARTH 486 - Art Historical Methodology (3)
One 300-level course from four of the following areas (12)
- Ancient
- Medieval
- Renaissance and Baroque
- Modern and American
- Islamic and Far Eastern
- African, Oceanian, Native American, and Pre-Columbian

One 400-level art history course (3)
Electives in art history (6)

Required Cognate Courses (18)

In addition to a minimum of 6 semester hours of studio art, select courses in related fields, such as literature, history, philosophy, anthropology, archaeology, or additional art history courses, in consultation with a major adviser (18)

Requirements outside School (0-12)

Fulfillment of B.A. foreign language requirement (0-12).
(See "Foreign Language Requirement for the B.A. Degree")

Total Hours for a Major in Art History: 54-66

Recommendation

Students who plan to enter graduate school should select French, German, or Italian to satisfy the B.A. foreign language requirement.

Degree with Honors

Majors in art history who have and maintain a minimum 3.40 GPA in all of their art history course work are eligible to participate in the honors program in art history. Students interested in obtaining the B.A. degree with honors should consult with the undergraduate coordinator or chair of the art history division as soon as possible after declaring their major.

Requirements for the baccalaureate degree in art history with honors include completion of the foreign language requirement for the B.A. degree in either French or German with a GPA of 3.00, and completion of a senior thesis. To complete the senior thesis students must take one of the following course sequences.

Two consecutive semesters of ARTH 499H - Senior Thesis during their senior year.
ARTH 486 - Art Historical Methodology, followed by ARTH 499H - Senior Thesis
ARTH 494 - Art History Undergraduate Seminar, followed by ARTH 499H - Senior Thesis

The senior thesis must be approved by a committee consisting of a project adviser and a second reader, both of whom must be art history faculty members.

Major in Art (B.A.)

Requirements in School (54)
ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTS 200 - Beginning Life Drawing (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
Other art courses (30)

Requirements outside School (0-12)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Total Hours for a Major in Art (B.A.): 54-66

Major in Studio Art (B.F.A.)

Emphasis 1. Design

Requirements in School (81)
ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTS 200 - Beginning Life Drawing (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ART 406 - Senior Project (3)
One of the following areas of study (54)

Time Arts
ARTD 267 - Introduction to Video Art (3)
ARTD 273 - Image/Text Fundamentals (3)
ARTD 275 - Introduction to Time Arts (3)
ARTD 355 - Critical Topics in Art and Time (3)
ARTD 367 - Web Design (3)
ARTD 369 - Audio Art (3)
ARTD 370 - Introduction to 2-D Animation (3)
Art history elective (3)
Course work from the following (18)
ARTD 373 - Introduction to 3-D Animation (3)
ARTD 409 - Advanced Interactivity (3)
ARTD 410 - Studies in Interactive Media (3)
ARTD 466 - Intermedia Arts (3)
ARTD 467 - Video Art (3)
ARTD 473 - Advanced Topics: 3D Animation (3)
Upper-division art studio electives (12)

Special requirements: An art student may select the time arts area of study; however, official admission to this area of study is based on successful portfolio review, which may be formally requested at the design area office by a qualified student. Students are qualified for the time arts area of study after successful completion of the following courses ARTD 267, ARTD 273, and ARTD 275.

Photography
ARTD 215 - Fundamentals of Graphic Design (3)
ARTD 302 - Color (3)
ARTD 313 - Beginning Photography (3)
ARTD 413 - Intermediate Photography (3)
ARTD 419 - Color Photography (3)
ARTD 468 - Advanced Photographic Media (6)
ARTD 469 - Problems in Photography (6)
Elective photographic studio courses (6)
Art studio electives with at least 9 hours from upper-division courses (18)
Art history elective (3)

Special requirements: A portfolio review is required for retention in the photography area of study after completing two courses in photography in the School of Art at NIU. A minimum GPA of 3.00 in all 300- and 400-level courses in this area of study is required for graduation. Prior to admission into ART 406 a student must confirm that the above minimum GPA has been met.

Visual Communication
ARTD 213 and ARTD 214 - Beginning Visual Communication I and II (6)
ARTD 218 - Introduction to Visual Communication Theory (3)
ARTD 302 - Color (3)
ARTD 311 and ARTD 312 - Intermediate Visual Communication I and II (6)
ARTD 316 - Package Design I (3)
ARTD 317 - Exhibit Design (3)
ARTH 381 - History of Visual Communication (3)
ARTD 411 and ARTD 412 - Advanced Visual Communication I and II (6)
Art studio electives (21)

Special requirements: The student must successfully complete a portfolio review after ARTD 214 (including work of ARTD 213 and ARTD 214) and have a minimum GPA of 3.00 in the following courses for graduation: ARTD 311, ARTD 312, ARTD 316, ARTD 317, ARTD 411, ARTD 412, ARTD 418A, and ARTD 418B. Prior to admission into ART 406, a student must confirm that the above minimum GPA requirement has been met.

Recommendation: Students are encouraged to select ANTH 220 and PSYC 102 toward fulfillment of the social science requirements in the general education program.

Total Hours for Emphasis 1, Design: 81

Special Requirements
Students must successfully complete a review of their senior project during ART 406.

Art electives chosen in consultation with faculty area adviser.

Emphasis 2. Fine Arts–2-D Studio

A portfolio review is required for retention in this emphasis after completion of designated courses in the chosen area of study.

Requirements in School (81)
ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTS 200 - Beginning Life Drawing (3)
ARTS 201 - Intermediate Life Drawing (3)
ARTS 300 - Intermediate Drawing (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ART 406 - Senior Project (3)
ARTH 398 - 20th Century Art (3),
OR ARTH 492 - Contemporary Art (3)
One of the following areas of study (45)

Drawing

ARTS 305 - Drawing Materials and Methods (3)
ARTS 310 - The Body in Contemporary Drawing (3)
ARTS 323 - Painting I (3)
ARTS 400 and ARTS 401 - Advanced Drawing I and II (6)
ARTS 402 - Advanced 2-D Figure Study (3)
ARTS 403 - Drawing Workshop (3)
Art studio electives with at least 6 semester hours of upper-division course work (9)
Four of the following (12)
- ARTS 321 - Watercolor Painting I (3)
- ARTS 330 - Introduction to Printmaking (3)
- ARTS 341 - Fundamentals of Ceramics (3)
- ARTS 351 - Beginning Metalwork and Jewelry (3)
- ARTS 361 - Beginning Sculpture I (3)
- ARTS 368 - Papermaking (3),
  - OR ARTS 372 - Surface Exploration of Fabric (3),
  - OR ARTS 374 - 3-D Forms in Fiber (3)

Special requirement: The student must successfully complete a sophomore portfolio review in drawing after the following courses ARTS 200 and ARTS 300.

Illustration

ARTD 215 - Fundamentals of Graphic Design (3)
ARTD 313 - Beginning Photography (3)
ARTS 321 - Watercolor Painting I (3),
- OR ARTS 323 - Painting I (3)

ARTS 327 and ARTS 328 - Illustration I and II (6)
ARTS 437A - Intermediate Illustration I (3)
ARTS 437B - Intermediate Illustration II (3)
ARTS 438A - Advanced Illustration I (3)
ARTS 438B - Advanced Illustration II (3)
ARTS 447 - Computer Raster Applications for Illustration (3)
ARTS 448 - Computer Vector Applications for Illustration (3)
Art studio electives in 2-D studio or 3-D studio (9)
Art studio elective (3)

Special requirement: Portfolio review after ARTS 328 (including work of ARTS 327) to continue in the illustration area of study.

Painting

ARTS 301 - Drawing Composition and Techniques (3),
- OR ARTS 305 - Drawing Materials and Methods (3)

ARTS 361 - Beginning Sculpture I (3)
ARTS 400 and ARTS 401 - Advanced Drawing I and II (6)
Art studio electives (15)
One of the following fields (18)
- Oil/Acrylic Painting
  - ARTS 323 and ARTS 324 - Painting I and II (6)
  - ARTS 325 - Painting III (3), or ARTS 402 - Advanced 2-D Figure Study (3)
  - ARTS 421 - Painting IV (9)
- Watercolor Painting
  - ARTS 321 and ARTS 322 - Watercolor Painting I and II (6)
  - ARTS 323 and ARTS 324 - Painting I and II (6)
  - ARTS 329 - Watercolor Painting III (3)
  - ARTS 422 - Watercolor Painting IV (3)

Special requirement: The student must successfully complete a sophomore portfolio review in painting after ARTS 323 and ARTS 324, or ARTS 321 and ARTS 322.

Printmaking

ARTS 305 - Drawing Materials and Methods (3)
ARTS 323 - Painting I (3)
ARTS 330 - Introduction to Printmaking (3)
ARTS 331 - Intermediate Printmaking: Lithography (3)
ARTS 332 - Intermediate Printmaking: Intaglio and Relief (3)
ARTS 333 - Intermediate Printmaking: Serigraphy (3)
ARTS 400 and ARTS 401 - Advanced Drawing I and II (6)
ARTS 430 - Advanced Printmaking Workshop (12)
Art studio electives (9)

Special requirement: Successful completion of a portfolio review in printmaking after two classes in the printmaking area to continue as a B.F.A. in this area of study.

Total Hours for Emphasis 2, Fine Arts–2-D Studio: 81

Emphasis 3. Fine Arts–3-D Studio

A portfolio review is required for admission to or retention in this emphasis after completion of two courses in the chosen area of study.

Requirements in School (81)

ART 100 - Drawing Foundation I (3)
ART 101 - Drawing Foundation II (3)
ART 102 - 2-D Foundation (3)
ART 103 - 3-D Foundation (3)
ARTS 200 - Beginning Life Drawing (3)
ARTH 291 - Art History Survey I: to 1150 (3)
ARTH 292 - Art History Survey II: 1150-1700 (3)
ARTH 293 - Art History Survey III: From 1700 (3)
ART 406 - Senior Project (3)
Art history elective (3)
One of the following areas of study (51)

Ceramics

ARTS 341 - Fundamentals of Ceramics (3)
ARTS 346A - Hand-Building Ceramics (3)
ARTS 346B - Wheel-Throwing Ceramics (3)
ARTS 347 - Technical Study in Ceramics (3)
ARTS 351 - Beginning Metalwork and Jewelry (3)
ARTS 361 - Beginning Sculpture I (3)
One of the following (3)
- ARTS 368 - Papermaking (3)
- ARTS 371 - Weaving (3)
- ARTS 372 - Surface Exploration of Fabric (3)
- ARTS 374 - 3-D Forms in Fiber (3)

ARTS 441A - Intermediate Hand-Building Ceramics (3)
ARTS 441B - Intermediate Wheel-Throwing Ceramics (3)
ARTS 446 - Advanced Ceramics (12)
Art studio electives (12)

Special requirement: The student must successfully complete a sophomore portfolio review in ceramics after ARTS 341 and ARTS 346A or B.

Fiber

ARTS 341 - Fundamentals of Ceramics (3)
ARTS 351 - Beginning Metalwork and Jewelry (3)
ARTS 361 - Beginning Sculpture I (3)
ARTS 368 - Papermaking (3)
ARTS 371 - Weaving (3)
ARTS 372 - Surface Exploration of Fabric (3)
ARTS 374 - 3-D Forms in Fiber (3)
Course work in at least three of the following (24)
- ARTS 470A - Intermediate/Advanced Fiber Studio: Weaving (3 or 6)
- ARTS 470B - Intermediate/Advanced Fiber Studio: Surface Exploration of Fabric (3 or 6)
- ARTS 470C - Intermediate/Advanced Fiber Studio: 3-D Forms in Fiber (3 or 6)
- ARTS 470D - Intermediate/Advanced Fiber Studio: Papermaking (3 or 6)

Art studio electives (6)

Special requirement: Portfolio review after any two 300 level fiber courses to continue in the fibers area of study.

Metalwork and Jewelry

ARTS 330 - Introduction to Printmaking (3)
ARTS 341 - Fundamentals of Ceramics (3)
ARTS 351 - Beginning Metalwork and Jewelry (3)
ARTS 352 - Intermediate Metalwork and Jewelry (3)
ARTS 361 and ARTS 362 - Beginning Sculpture I and II (6)

One of the following (3)
ARTS 368 - Papermaking (3)
ARTS 371 - Weaving (3)
ARTS 372 - Surface Exploration of Fabric (3)
ARTS 374 - 3-D Forms in Fiber (3)
ARTS 451 - Advanced Metalwork and Jewelry (12)
ARTS 452 - Advanced Research in Metalwork and Jewelry (6)
ARTS 453 - Beginning Enameling (3)
ARTS 454 - Advanced Enameling (3)
Art studio electives (6)

Sculpture
ARTS 341 - Fundamentals of Ceramics (3)
ARTS 351 - Beginning Metalwork and Jewelry (3)
ARTS 361 and ARTS 362 - Beginning Sculpture I and II (6)
ARTS 363 and ARTS 364 - Intermediate Sculpture I and II (6)
ARTS 371 - Weaving (3)
ARTS 456 - Technical Studio (3)
ARTS 461 and ARTS 462 - Advanced Sculpture I and II (6)
Art Studio electives (21)

Special requirement: The student must successfully complete a sophomore portfolio review in sculpture after ARTS 361 and ARTS 362.

Total Hours for Emphasis 3, Fine Arts–3-D Studio: 81

Minor in Art (21)

Declaration of this minor by students majoring in art education (B.S.Ed.) or studio art (B.A. or B.F.A.) is not permitted. Students majoring in art history are permitted to minor in art provided the electives in art are not double-counted in the major and the minor.

ART 100 - Drawing Foundation I (3)
ART 102 - 2-D Foundation (3)
*ARTH 293 - Art History Survey III: From 1700 (3)
Electives in art (12)

Minor in Art History (21)

Declaration of this minor by students majoring in art education (B.S.Ed.) or studio art (B.A. or B.F.A.) is permitted, provided the electives in art history are not double-counted in the major and the minor.

*ARTH 291 - Art History Survey I: to 1150 (3)
*ARTH 292 - Art History Survey II: 1150-1700 (3)
*ARTH 293 - Art History Survey III: From 1700 (3)
Electives in art history (12)

Course List

The School of Art reserves the right to retain for its collection any work produced in scheduled classes. Studio-lecture courses meet two hours per semester hour each week. Students in studio courses are required to schedule one hour per week in the studio (in addition to class time) for each semester hour.

Enrollment in one course for more than 6 hours per semester requires consent of the School of Art.

Foundations and General (ART)

ART 100. DRAWING FOUNDATION I (3). Introduction to drawing. Emphasis on object representation through descriptive and expressive means. Control of line, value, and spatial illusion with variety of media. PRQ: Art major or minor.

ART 101. DRAWING FOUNDATION II (3). Further exploration of basic drawing media. Development of skill in representation and interpretation of subjects. PRQ: Art major or minor, and ART 100.

ART 102. 2-D FOUNDATION (3). Comprehensive study of design elements and principles through the study of two-dimensional space. Emphasis on inventiveness in the use of various media. Studio and lecture. PRQ: Art major or minor.

ART 103. 3-D FOUNDATION (3). Intensive study of form and structure in three-dimensional space. Studio and lecture. PRQ: Art major or minor and ART 102.

ART 105. EXPLORING VISUAL PROFESSIONS (1). Exploration of the theory and practice of art education, art history, design, and fine arts through field trips, guest speakers, and lectures.

ART 406. SENIOR PROJECT (3). Professional practice in the student's area of study. Field experience, studio and/or lecture. S/U grading except in the areas of study in painting, drawing, printmaking, and sculpture, where letter grades may be assigned. May be repeated to a maximum of 6 semester hours for students completing a double major in the School of Art. PRQ: Senior standing.

ART 450. FIELD STUDIES IN ART (2 to 9). Independent study and directed research problems in the student's major emphasis under approved guidance in cooperating off-campus organizations. May be repeated to a maximum of 9 semester hours. S/U grading. PRQ: Upper division standing and consent of school.

ART 457. MUSEUM EDUCATION (3). History, philosophy, and practice of museum education. Study and practical application through class projects and practicum of planning and implementing public programming, tour techniques, museum-school services, and development and evaluation of educational materials and outreach programs. Lectures, individual projects, observation in museums, and practicum. PRQ: ART 465 or consent of school.

ART 465. INTRODUCTION TO MUSEUM STUDIES (3). Survey of the history and philosophy of museums and museum typology. Overview of the purposes, structure, and operations of museums with attention to current issues and practices relating to ethics, collections, exhibitions, and education. Lectures, discussion, museum field trips, museum practicum. PRQ: Junior standing in art or consent of school.

ART 489. TOPICS IN ART (1 to 6). Concentrated study with professional artists and/or art educators. Offered irregularly. Studio, lecture, and discussion, and/or field trip. May be repeated to a maximum of 12 semester hours.

ART 490. INDEPENDENT RESEARCH (1 to 9). Work on individual problems in the student's major field. May be repeated to a maximum of 9 semester hours. PRQ: Consent of school.

Art Design (ARTD)

ARTD 210. INTRODUCTION TO DESIGN (3). Comprehensive study of the fundamentals of two- and three-dimensional design, required of and limited to students in the design emphasis with transfer credit for ART 102 and/or ART 103.

ARTD 213. BEGINNING VISUAL COMMUNICATION I (3). Introduction to theoretical and practical aspects of graphic design with an emphasis on typography. May be repeated to a maximum of 6 semester hours with consent of school. PRQ: ART 100, ART 101, ART 102, and ART 103, with a minimum GPA of 3.00 and a minimum university GPA of 2.50 or consent of school.

ARTD 214. BEGINNING VISUAL COMMUNICATION II (3). Further work in graphic design with emphasis on typography and graphic production. May be repeated to a maximum of 6 semester hours with consent of school. PRQ: ARTD 213.

ARTD 215. FUNDAMENTALS OF GRAPHIC DESIGN (3). Comprehensive study of theoretical and practical aspects of graphic design. Studio and lecture. Not open to students pursuing the area of study in visual communication or to students with credit for ARTD 213. PRQ: ART 101 and ART 102 or ARTD 210.

ARTD 218. INTRODUCTION TO VISUAL COMMUNICATION THEORY (3). Introduction to how people interpret graphic design through the use of semiotic theory, critical models, design methodology, and ethics. PRQ: ART 100 and ART 102.

ARTD 267. INTRODUCTION TO VIDEO ART (3). Concepts and techniques of video art. PRQ: ART 100, ART 101, ART 102, and ART 103, or consent of school.

* Available for general education credit.

ARTD 273. IMAGE/TEXT FUNDAMENTALS (3). Methods for creating text and images on the computer. Projects may include animation, image processing, and programming of text and graphics. PRQ: ART 100, ART 101, ART 102, and ART 103, or consent of school.

ARTD 275. INTRODUCTION TO TIME ARTS (3). Theory and application of time-art computer graphic technology in design and fine art with emphasis on interactivity. PRQ: ART 100, ART 101, ART 102, and ART 103, or consent of school.

ARTD 302. COLOR (3). Color theory: Munsell, Ostwald, Itten, Albers. Combination of lecture and studio aimed at developing sensitivity to color and knowledge of its properties. PRQ: ART 102.

ARTD 311. INTERMEDIATE VISUAL COMMUNICATION I (3). Use of typography and imagery in the problem-solving processes in graphic design with emphasis on the development of conceptual skills. PRQ: ARTD 214 and sophomore portfolio review. CRQ: ARTD 316.

ARTD 312. INTERMEDIATE VISUAL COMMUNICATION II (3). Further work in graphic design procedures and techniques for specific problems in various media. PRQ: ARTD 218, ARTD 311, and ARTD 316. CRQ: ARTD 317.

ARTD 313. BEGINNING PHOTOGRAPHY (3). Designed to provide basic skills in technical processes of photography for the art student and to equip the student to use photography as an art medium. PRQ: ART 102 or consent of school.

ARTD 316. PACKAGE DESIGN I (3). Design of containers and packages with emphasis on the structural and visual considerations for merchandising. PRQ: Successful completion of sophomore review in visual communication.

ARTD 317. EXHIBIT DESIGN (3). Design and construction of three-dimensional displays for visual communication. PRQ: Successful completion of sophomore review in visual communication.

ARTD 355. CRITICAL TOPICS IN ART AND TIME (3). Seminar on theoretical, social, and aesthetic issues in interactive and computer-based 4-D art. PRQ: Successful completion of sophomore review in photography, time arts, or visual communication, or consent of school.

ARTD 358. PACKAGE DESIGN II (3). Intensive study of product lines in package design involving analysis of marketing, structure, and graphic design factors. PRQ: ARTD 316 and consent of school.

ARTD 360. INTERMEDIATE DESIGN (3). Theories of design including concepts from theories of structure, theories of systems, ecology, morphology, topology, and perception. PRQ: ART 103.

ARTD 367. WEB DESIGN (3). Intermediate studies in theory and techniques of interactivity on the computer. PRQ: ARTD 267, ARTD 273, ARTD 275, and successful completion of sophomore portfolio review.

ARTD 369. AUDIO ART (3). Studies in the concepts and practice of nonmusical audio art with emphasis on combining audio with other media. PRQ: Successful completion of sophomore review in photography, time arts, or visual communication, or consent of school.

ARTD 370. INTRODUCTION TO 2-D ANIMATION (3). Concepts and practice of animation with emphasis on computer-based 2-D animation. PRQ: ARTD 267, ARTD 273, ARTD 275, or consent of school, and successful completion of sophomore portfolio review.

ARTD 373. INTRODUCTION TO 3-D ANIMATION (3). Concepts and practices of 3-D modeling and animation. PRQ: ARTD 370 or consent of school.

ARTD 375. SPECIAL PROBLEMS IN ELECTRONIC MEDIA-IMAGE DESIGN (3). Exploration of visual design problems particular to the electronic medium. Topics announced. PRQ: ARTD 273 and ARTD 275, or consent of school.

ARTD 404. DESIGN METHODOLOGIES (3). Investigation and utilization of problem-solving strategies for the designer. PRQ: Consent of school.

ARTD 405. PROFESSIONAL PRACTICES IN DESIGN (3). Investigation of business, legal, and ethical aspects of professional practice for designers. Effective communication concerns in client relationships and contract documents. Fundamental considerations within office practice; the designer's role and responsibilities. PRQ: Successful completion of sophomore review in photography, time arts, or visual communication, or consent of school.

ARTD 408. LIGHTING DESIGN (3). A conceptual framework for understanding light with emphasis on light sources, their applications, qualities, and color effects. Acquaintance with basic calculation methods as a support for the lighting design process. PRQ: Successful completion of sophomore review in photography, time arts, or visual communication, or consent of school.

ARTD 409. ADVANCED INTERACTIVITY (3). Interactive art with emphasis on structured and individual projects. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 367.

ARTD 410. STUDIES IN INTERACTIVE MEDIA (3). Exploration in interactive art with emphasis on individual projects. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 409 or consent of school.

ARTD 411. ADVANCED VISUAL COMMUNICATION I (3). Student-selected topics of investigation with emphasis on problem solving: exploration of signs and symbols resulting in a client-based identity system or analytical and creative approaches of designing specific publications. PRQ: ARTD 312 or ARTD 317, or consent of school.

ARTD 412. ADVANCED VISUAL COMMUNICATION II (3). General exploration of the sign process with emphasis on sequential organization of materials for application or publication and the translation of written and statistical information into graphic form. PRQ: ARTD 411. CRQ: ART 406.

ARTD 413. INTERMEDIATE PHOTOGRAPHY (3). Further exploration of the technical and aesthetic aspects of photography as a contemporary art medium. Studio, lecture, and laboratory. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 313 or consent of school.

ARTD 418A. SPECIAL PROBLEMS IN VISUAL COMMUNICATION (3). Specific studies in related areas of visual communication. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: Successful completion of sophomore review in visual communication or consent of school.

ARTD 418B. ADVANCED PROBLEMS IN VISUAL COMMUNICATION (3). Advanced studies in related areas of visual communication. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 312 or consent of school.

ARTD 419. COLOR PHOTOGRAPHY (3). Exploration of technical and aesthetic aspects of color photography as a contemporary art medium. Studio, lecture, and laboratory. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 313 or consent of school.

ARTD 420. DESIGN FIELD EXPERIENCE (1 to 6).
A. Time Arts
C. Visual Communication
D. Photography
Cooperative work experience for students in the design and technology emphasis. Cooperatively supervised professional practice with selected and/or approved design firms to provide a learning experience complementary to the student's area of study in design. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Advanced standing in the design student's area of study and approval of the faculty field experience adviser in the design student's area of study.

ARTD 466. INTERMEDIA ARTS (3). Studies in art combining (mostly electronic) media, with emphasis on individual projects. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: Successful completion of sophomore review in photography, time arts, or visual communication, or consent of school.

ARTD 467. VIDEO ART (3). Studies in video art production with a focus on individual projects. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 267 or consent of school.

ARTD 468. ADVANCED PHOTOGRAPHIC MEDIA (3). Advanced projects in photographic media. Topics announced. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 413 or consent of school.

ARTD 469. PROBLEMS IN PHOTOGRAPHY (3). Advanced individual work in photographic media with emphasis on experimentation and artistic expression. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 413 or consent of school.

ARTD 473. ADVANCED TOPICS: 3D ANIMATION (3). Intensive work in animation using primarily 3-D techniques with emphasis on individual projects. PRQ: ARTD 373, or consent of school.

Art Education (ARTE)

ARTE 342. INTRODUCTION TO ART EDUCATION: CONTENT AND CLINICAL EXPERIENCE AT THE ELEMENTARY LEVEL (3). Overview of the history of art education and its philosophical premises. Examination of opportunities and varied approaches possible in teaching art. Study of developmental characteristics of the learner. Practice in use of instructional materials and construction of lesson plans. Directed observation and supervised participation with a variety of populations and educational situations with emphasis on elementary-level public school settings for a minimum of 25 hours of clinical experience. Discussion, lecture, and studio. PRQ: Proof of freedom from tuberculosis, successful completion of the Illinois Test of Basic Skills and the criminal background check required for certification; ART 100, ART 101, ART 102, ART 103; at least two of ARTH 291, ARTH 292, ARTH 293; and minimum 2.50 cumulative GPA.

ARTE 344. RESOURCES AND METHODS IN ART EDUCATION: CONTENT AND CLINICAL EXPERIENCE AT THE MIDDLE LEVEL (3). Experience with various art processes, tools, and media appropriate to the classroom. Study of the resources available to the teacher, including both audio and visual instructional materials and techniques. Study of multiculturalism. Directed observation and supervised participation with a variety of populations and educational situations with emphasis on middlelevel public school settings for a minimum of 25 clock hours of clinical experience. Discussion, lecture, and studio. PRQ: ARTE 342 and admission to teacher certification, or consent of school.

ARTE 345. CURRICULUM DEVELOPMENT IN ART EDUCATION: CONTENT AND CLINICAL EXPERIENCE AT THE HIGH SCHOOL LEVEL (3). Developing sequential curricula for art at the high school level related to the individual, the community, and the organizational system of schools including a multicultural component. Directed observation and supervised participation with a variety of populations and educational situations with emphasis on high school settings for a minimum of 25 clock hours of clinical experience. Discussion, lecture, and studio. PRQ: ARTE 344 and ARTE 463, and admission to teacher certification, or consent of school.

ARTE 383. TEACHING ART IN ELEMENTARY SCHOOLS (3). Objectives, procedures, resources, and activities related to art education for the elementary classroom. Studio, lecture, and discussion. Limited to elementary education and special education majors, or consent of school.

ARTE 463. APPLICATION OF AESTHETICS, ART HISTORY, AND CRITICISM IN ART EDUCATION (3). Thematic, interdisciplinary, and multicultural approach to the application of aesthetic, art historical, and critical theory and methods to instructional practice in museums and elementary and secondary schools. Emphasis on alternative methods of presenting the content of aesthetics, art history and criticism, and on the use of teacher-made and commercial instructional resources. PRQ: 9 semester hours in art history survey and ARTE 342 for art education majors, and admission to teacher certification, or consent of school.

ARTE 479. ART FOR SPECIAL NEEDS POPULATIONS (3). Philosophies, instructional methods, practice and experiences with appropriate materials, resources and opportunities related to art education in special education. Lecture, discussion, and field experiences. Limited to elementary, special, and art education majors and students with an interest in art therapy or consent of school. PRQ: ARTE 342, or consent of school.

ARTE 480. ALTERNATIVE TEACHING EXPERIENCES (3 to 12). Internship teaching in community centers, social agencies, and other facilities offering educational programs outside of the public school pattern. Cooperatively supervised field experiences in alternative modes of instruction. PRQ: Approval of art education adviser.

ARTE 482. CLINICAL EXPERIENCES (2). Directed lesson planning, including a multicultural component, and supervised teaching experiences for art education majors. Must include the Saturday Morning Children's Art Program, or summer high school art camp, or other directed, in-depth clinical experience for a minimum of 25 clock hours of clinical experience. May be repeated to a maximum of 6 semester hours. PRQ: ARTE 342 and admission to teacher certification, or consent of school.

ARTE 483. ART IN ELEMENTARY SCHOOLS (3). Adapting visual arts concepts derived from art history, art criticism, studio arts, and aesthetics as appropriate to the elementary child and the self-contained classroom. Field trip, lecture, studio, critique, and microteaching experiences. Not open to art majors.

ARTE 484. INTERRELATED ARTS EDUCATION (3). Exploration of aesthetic concepts pertinent to education in the arts. Analysis of curricular structures that accommodate an education in combined arts and basic assumptions underlying these structures. Planning, developing, and implementing arts programs in the context of visual arts in K-12 educational systems.

ARTE 488A. STUDENT TEACHING IN ELEMENTARY ART (6). Student teaching at the K-8 grade level for approximately one-half semester. Assignments to be made after approval by the School of Art, art education area. (See "Teacher Certification Requirements.") PRQ: ARTE 345, final approval of portfolio, and successful completion of the Illinois Subject Matter Knowledge Test (Art K-12). CRQ: ARTE 488B.

ARTE 488B. STUDENT TEACHING IN SECONDARY ART (6). Student teaching at the 9-12 grade level for approximately one-half semester. Assignments to be made after approval by the School of Art, art education area. (See "Teacher Certification Requirements.") PRQ: ARTE 345, final approval of portfolio, and successful completion of the Illinois Subject Matter Knowledge Test (Art K-12). CRQ: ARTE 488A.

Art History (ARTH)

ARTH 282. INTRODUCTION TO THE VISUAL ARTS (3). Development of an understanding of the visual arts through a study of various art media and their cultural backgrounds. Course will not count for credit toward a major or minor in art.

ARTH 288. MODERN ART AND FILM (3). Development of and interaction between the visual arts and the cinematic arts within the context of modern art history.

ARTH 291. ART HISTORY SURVEY I: TO 1150 (3). Art and architecture from prehistoric times through the Romanesque period.

ARTH 292. ART HISTORY SURVEY II: 1150-1700 (3). Art and architecture from the Early Gothic period through the 17th century.

ARTH 293. ART HISTORY SURVEY III: FROM 1700 (3). Art and architecture from the 18th century to the present.

ARTH 294. ART HISTORY SURVEY IV: ARTS OF THE EAST (3). Arts of the Middle East, Far East, and Southeast Asia.

ARTH 376. LATIN AMERICAN ART (3). Art and architecture of Central and South America.

ARTH 377. ISLAMIC ART (3). Art and architecture of Islamic cultures.

ARTH 378. INDIAN AND SOUTHEAST ASIAN ART (3). Art and architecture of Hindu and Buddhist cultures.

ARTH 379A. FAR EASTERN ART: CHINA (3). Art and architecture of China from neolithic times through the Ch'ing Dynasty.

ARTH 379B. FAR EASTERN ART: JAPAN (3). Art and architecture of Japan from neolithic times through the Meiji Restoration.

ARTH 381. HISTORY OF VISUAL COMMUNICATION (3). Chronological survey of the developments in the allied fields of graphic design and illustration from the Victorian era to the present.

ARTH 384. AFRICAN ART (3). Art and material culture of Africa including examples from prehistoric rock paintings to contemporary art.

ARTH 385. PRE-COLUMBIAN ART (3). Art and architecture of ancient Mesoamerica and Peru.

ARTH 386. ART OF AFRICA, OCEANIA, AND THE AMERICAS (3). Indigenous arts of Sub-Saharan Africa, Oceania, and the Americas (Pre-Columbian and Native American).

ARTH 387A. ANCIENT ART I: EGYPT (3). Art and architecture of ancient Egypt.

ARTH 387B. ANCIENT ART I: MESOPOTAMIA (3). Art and architecture of ancient Mesopotamia.

ARTH 388A. ANCIENT ART II: PRECLASSICAL ART (3). Art and architecture of Minoan Crete, the Mycenaean world and the Cyclades.

ARTH 388B. ANCIENT ART II: CLASSICAL ART (3). Art and architecture of Classical Greece from the Geometric period to the end of the Hellenistic.

ARTH 389. ANCIENT ART III: ETRUSCAN AND ROMAN ART (3). Etruscan and Roman art and architecture.

ARTH 390A. EARLY CHRISTIAN AND EARLY BYZANTINE ART: 330-843 (3). Early Christian and early Byzantine art and architecture from the reign of Constantine the Great to the end of the Iconoclastic Controversy.

ARTH 390B. MIDDLE AND LATE BYZANTINE ART: CA. 843-1453 (3). Art and architecture of the middle and late periods of the Byzantine Empire and the Slavonic world from the end of the Iconoclastic period to the fall of Constantinople in 1453.

ARTH 391A. EARLY MEDIEVAL ART: CA. 500-1000 (3). Developments in the art and architecture of Western Europe following the Early Christian period, including discussions of Hiberno-Saxon, Carolingian, and Ottonian art.

ARTH 391B. ROMANESQUE AND GOTHIC ART (3). Art and architecture of Western Europe, ca. 1000-1400, with some later Northern European developments in architecture.

ARTH 392A. NORTHERN RENAISSANCE ART I (3). Manuscript illumination and panel painting in Northern Europe from ca. 1300 to ca. 1480.

ARTH 392B. NORTHERN RENAISSANCE ART II (3). Manuscript illumination, panel painting, and printmaking in Northern Europe from ca. 1480 to ca. 1600.

ARTH 393. ITALIAN EARLY RENAISSANCE ART (3). Art and architecture of the early Renaissance in Italy.

ARTH 394. BAROQUE AND ROCOCO ART (3). Baroque and Rococo art and architecture in Europe.

ARTH 395. 19TH CENTURY ART (3). Art and architecture from the French Revolution to ca. 1900.

ARTH 396. ITALIAN HIGH RENAISSANCE ART (3). Art and architecture of the High Renaissance in Italy.

ARTH 397. AMERICAN ART (3). Art and architecture in America from ca. 1670 to the present.

ARTH 398. 20TH CENTURY ART (3). Art from ca. 1900 to the present in Western Europe and the United States, with focus on the concept of "modernism."

ARTH 476. ART OF THE EASTERN MEDITERRANEAN AND ANATOLIA (3). Analytical study of art and architecture of the Eastern Mediterranean, Western Asia Minor, Anatolia, and the Levant Coast from the beginning of the Stone Age to the downfall of the Phoenician commercial empire.

ARTH 485. TOPICS IN ART HISTORY (3). Topics announced. May be repeated, but credit is limited to 3 semester hours per topic.

ARTH 486. ART HISTORICAL METHODOLOGY (3). Studies of various methodological approaches and tools employed in the discipline of art history. PRQ: 6 semester hours of art history survey or equivalent, or consent of school.

ARTH 487. SOUTHEAST ASIAN ART (3). Art of Burma, Thailand, Malaysia, Cambodia, Laos, North Vietnam, South Vietnam, and Indonesia.

ARTH 491. HISTORY OF PRINTS AND GRAPHIC PROCESSES (3). Development of woodcuts, etching, engraving, lithography, etc., in the history of art.

ARTH 492. CONTEMPORARY ART (3). Study of current art directions, styles, and attitudes and their relationships to contemporary society.

ARTH 493. HISTORY OF ARCHITECTURE III: FROM 1900 (3). Study of building styles, theories, form, and construction as exemplified by major architectural monuments from 1900 to the present.

ARTH 494. ART HISTORY UNDERGRADUATE SEMINAR (3). Special problems in the analysis of various topics in art history. Includes in-class presentation of research topic. Open only to upper-division students admitted to honors work in art history. Topics vary by instructor. May not be counted as University Honors program's Junior Honors Seminar by majors in School of Art. PRQ: ARTH 486 and junior or senior status, or consent of school.

ARTH 496A. HISTORY OF DECORATIVE ARTS: FURNITURE (3). Chronological survey from ancient Egypt to the present.

ARTH 496B. HISTORY OF DECORATIVE ARTS: MINOR ARTS AND CRAFTS (3). Chronological survey from ancient Egypt to the present.

ARTH 497. HISTORY OF ARCHITECTURE I: TO 1400 (3). Building styles, theories, form, and construction as exemplified by major architectural monuments from the ancient world through the end of the Middle Ages.

ARTH 498. HISTORY OF ARCHITECTURE II: 1400-1900 (3). Building styles, theories, form, and construction as exemplified by major architectural monuments from the Renaissance through the 19th century.

ARTH 499H. SENIOR THESIS (3). Independent research for honors students on an art historical problem under direction of faculty adviser leading to the completion of a written report and an oral presentation to a thesis committee. May be repeated to a maximum of 6 semester hours. PRQ: ARTH 486 and senior status, or consent of school.

2-D and 3-D Studio (ARTS)

ARTS 200. BEGINNING LIFE DRAWING (3). Study of the human figure through exercises in contour, modeling, and gesture drawing in a variety of media. PRQ: ART 101.

ARTS 201. INTERMEDIATE LIFE DRAWING (3). Further studies of the human figure in various media. Emphasis on form interpretation and composition. PRQ: ARTS 200.

ARTS 261. 3-D MATERIALS AND TECHNIQUES (3). Introduction to materials and techniques of three-dimensional media and technical introduction to a variety of materials and processes including woodworking and welding. Studio and lecture. PRQ: ART 100 and ART 102.

ARTS 300. INTERMEDIATE DRAWING (3). Opportunity to develop interpretive and representational skills through work in a variety of drawing media. PRQ: ART 101, ARTS 200.

ARTS 301. DRAWING COMPOSITION AND TECHNIQUES (3). Further study of form and space through a variety of drawing media and subjects. PRQ: ARTS 300.

ARTS 305. DRAWING MATERIALS AND METHODS (3). Advanced study and investigation of form and space with emphasis on exploring a variety of contemporary drawing media and methods. PRQ: Successful completion of sophomore portfolio review in drawing.

ARTS 310. THE BODY IN CONTEMPORARY DRAWING (3). Investigation of contemporary figurative work in various media, including traditional drawing and painting and 3-D and 4-D approaches. PRQ: ARTS 201 and successful completion of sophomore review in drawing.

ARTS 321. WATERCOLOR PAINTING I (3). Painting in various watersoluble media. PRQ: ART 101 and ART 102.

ARTS 322. WATER COLOR PAINTING II (3). Development of personal skills and techniques using water-soluble media. PRQ: ARTS 321.

ARTS 323. PAINTING I (3). Development of the student's ability in painting with emphasis on ideas and materials. PRQ: ART 101 and ART 102.

ARTS 324. PAINTING II (3). Further study of the processes and techniques of painting. PRQ: ARTS 323.

ARTS 325. PAINTING III (3). Continued development of processes and techniques with emphasis on personal expression. PRQ: ARTS 324 and successful completion of sophomore portfolio review in painting.

ARTS 327. ILLUSTRATION I (3). Introduction to black and white illustration with emphasis on techniques and approaches for developing representational and observational drawing skills and how they relate to the methods and subject matter of illustration. CRQ: ARTS 200.

ARTS 328. ILLUSTRATION II (3). Continuation of black and white media with emphasis on the thought process and its relationship to the formation of finished illustrations; continued development of observational drawing skills and an introduction to color. PRQ: ARTS 327.

ARTS 329. WATERCOLOR PAINTING III (3). Continued development of processes, skills, and concepts using water-soluble media. PRQ: ARTS 322 and successful completion of sophomore portfolio review in painting.

ARTS 330. INTRODUCTION TO PRINTMAKING (3). Overview and introduction to basic principles and fine art studio applications of the primary printmaking media – intaglio, relief, lithography, and serigraphy. Idea and imagery development and print history. PRQ: ART 101 and ART 102.

ARTS 331. INTERMEDIATE PRINTMAKING: LITHOGRAPHY (3). Comprehensive study of planographic printing from stone, aluminum, and photographic plates with an introduction to color printing. Discussion and studio work in various phases of the process with emphasis on concept development. PRQ: ARTS 330.

ARTS 332. INTERMEDIATE PRINTMAKING: INTAGLIO AND RELIEF (3). Comprehensive study of intaglio and relief printing processes with a focus on color printing methods. Discussion and studio work in various phases of the process with emphasis on concept development. PRQ: ARTS 330.

ARTS 333. INTERMEDIATE PRINTMAKING: SERIGRAPHY (3). Comprehensive study of the serigraphy (screenprinting) medium, printing in multiple colors. Various hand-created and photographic stencil techniques. Discussion and studio work in various phases of the process with emphasis on concept development. PRQ: ARTS 330.

ARTS 338. ANATOMICAL DRAWING (3). Sketches and finished drawings executed from cadavers. Research through pictorial resources required regarding muscle origins and insertions, organs, and the internal skeletal structure. PRQ: ARTS 201 and successful completion of sophomore portfolio review in drawing or illustration.

ARTS 339. BEGINNING SCIENTIFIC ILLUSTRATION (3). Introduction to basic scientific representational drawing with emphasis on the biological sciences. PRQ: ARTS 200.

ARTS 340. INTERMEDIATE SCIENTIFIC ILLUSTRATION (3). Continuation of ARTS 339 with introduction to painting techniques with emphasis on zoological science. PRQ: ARTS 339.

ARTS 341. FUNDAMENTALS OF CERAMICS (3). Introduction to ceramics using basic hand-building and wheel-throwing techniques for the exploration of form, texture, and glaze applications. Studio and lecture.

ARTS 346A. HAND-BUILDING CERAMICS (3). Use of hand-building techniques for the exploration of form in individually assigned problems. Laboratory experience in clay and glaze testing, studio clay mixing, and kiln firing. Studio and lecture. PRQ: ARTS 341 or consent of school.

ARTS 346B. WHEEL-THROWING CERAMICS (3). Exploration of form and texture through individually assigned problems using wheel-throwing techniques. Laboratory experience in clay and glaze testing, studio clay mixing, and kiln firing. Studio and lecture. PRQ: ARTS 341 or consent of school.

ARTS 347. TECHNICAL STUDY IN CERAMICS (3). Theory and laboratory experience in clay testing and mixing, glaze testing and mixing, engobe and slip formulation, materials and studio safety, and electric and gas kiln firings. PRQ: ARTS 346A and ARTS 346B, or consent of school.

ARTS 351. BEGINNING METALWORK AND JEWELRY (3). Introduction to jewelry with emphasis on basic fabrication techniques. Studio and lecture. PRQ: ART 100, ART 101, ART 102, and ART 103, or consent of school.

ARTS 352. INTERMEDIATE METALWORK AND JEWELRY (3). Introduction to basic forging, and raising, casting, and electroforming and other techniques as they are applicable to the contemporary field of metalwork and jewelry. PRQ: ARTS 351 or consent of school.

ARTS 361. BEGINNING SCULPTURE I (3). Exploration of theory, context, and methods of object making. Technique covered as appropriate to an assignment or a student's work. Studio, lecture, and readings.

ARTS 362. BEGINNING SCULPTURE II (3). Continuation of and progression from ARTS 361. Studio, lecture, and readings. PRQ: ARTS 361.

ARTS 363. INTERMEDIATE SCULPTURE I (3). Individual studio practice with emphasis on research and the development of critical and theoretical analysis of the student's process and activities. Opportunity for intensive study and studio work. Studio, research, and lecture. PRQ: ARTS 362.

ARTS 364. INTERMEDIATE SCULPTURE II (3). Continuation of ARTS 363. Studio, research, and lecture. PRQ: ARTS 363.

ARTS 368. PAPERMAKING (3). Exploration of papermaking technique including sheet forming (Western and Eastern traditions), embossing, embedding, lamination, watermarking, and casting. Discussion of various fibers suitable for making paper. Studio, lecture, readings, and discussion of the meaning/context of materials. PRQ: ART 103 or consent of school.

ARTS 371. WEAVING (3). Exploration of two- and four-harness weaving with emphasis on cloth as an expressive medium. Studio, lecture, readings, and discussion of the meaning/context of cloth. PRQ: ART 103 or consent of school.

ARTS 372. SURFACE EXPLORATION OF FABRIC (3). Exploration of techniques to alter, transform, and manipulate the two-dimensional surface of fabric. Emphasis on cloth as an expressive medium. Dyeing, resists, printing, surface embellishment, stitching, devore, and cloque. Studio, lecture, readings, and discussion of the meaning/context of cloth. PRQ: ART 103 or consent of school.

ARTS 374. 3-D FORMS IN FIBER (3). Exploration of materials and processes for creating three-dimensional form in the fiber tradition. Wrapping, coiling, knotting, looping, basic papermaking, and the notion of "skins" (gut, paper pulp, latex). Studio, lecture, readings, and discussion of the meaning/context of materials. PRQ: ART 103 or consent of school.

ARTS 400. ADVANCED DRAWING I (3). Intensive studio work in perceptual and conceptual problems using a variety of media. PRQ: ARTS 300 and successful completion of sophomore portfolio review in drawing, painting, or printmaking.

ARTS 401. ADVANCED DRAWING II (3). Further intensive studio work in selected drawing media. May be repeated. PRQ: ARTS 400.

ARTS 402. ADVANCED 2-D FIGURE STUDY (3). 2-D studio work emphasizing the expressive use of the figurative motif. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 323, and successful completion of sophomore review in drawing, painting, printmaking, or illustration, or consent of school.

ARTS 403. DRAWING WORKSHOP (3). Advanced studio work in expressive drawing processes involving use of form, content, and technique. Emphasis on selected directions. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 400.

ARTS 421. PAINTING IV (3 or 6). Individually selected studio problems in painting. May be taken concurrently with ARTS 325 or one other section of ARTS 421. May be repeated. CRQ: ARTS 325.

ARTS 422. WATERCOLOR PAINTING IV (3 or 6). Further exploration of technical and aesthetic aspects of watercolor painting. May be taken concurrently with one other section of ARTS 422. May be repeated. PRQ: ARTS 329.

ARTS 423. SELECTED PROBLEMS IN STUDIO ART (3). Emphasis on specific concepts and/or processes within the drawing, painting, and printmaking curriculum. May be repeated to a maximum of 6 semester hours. PRQ: ART 101 and consent of school.

ARTS 424. ATELIER DRAWING (3). Directed study to expand knowledge of a specific style of drawing with emphasis on current philosophies, instructional methods, practice, and experiences. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 300, ARTS 301, or consent of school.

ARTS 425. ATELIER PAINTING (3). Directed study to expand knowledge of a specific style of painting with emphasis on current philosophies, instructional methods, practice, and experiences. May be repeated to a maximum of 6 semester hours. PRQ: ARTS 301, ARTS 323, or consent of school.

ARTS 430. ADVANCED PRINTMAKING WORKSHOP(3 or 6). Emphasis on developing individual skills and a body of work utilizing the medium. May be repeated. PRQ: ARTS 331, ARTS 332, ARTS 333, and successful completion of portfolio review in printmaking.

ARTS 436. SELECTED PROBLEMS IN ILLUSTRATION (3). Emphasis on contemporary problems of illustration theory, using current illustration materials, equipment, and techniques. Topics announced. May be repeated. PRQ: ARTS 328.

ARTS 437A. INTERMEDIATE ILLUSTRATION I (3). Continuation of black and white media and a more in-depth exploration of color, materials, and techniques with emphasis on editorial, book, and advertising illustration. PRQ: ARTS 328 and successful completion of portfolio review.

ARTS 437B. INTERMEDIATE ILLUSTRATION II (3). Further development of the student's ability in the use of wet media for editorial and advertising illustration. PRQ: ARTS 437A.

ARTS 438A. ADVANCED ILLUSTRATION I (3). Continued exploration of color and black and white production media and the visualization process. Students work with problems in selected illustration venues/areas. PRQ or CRQ: ARTS 437B.

ARTS 438B. ADVANCED ILLUSTRATION II (3). Intensive studio work with emphasis on traditional and contemporary color or black/white illustration media. In conjunction with the instructor, students select an area of focus, i.e., advertising, editorials, or book. PRQ or CRQ: ARTS 438A.

ARTS 439. ADVANCED SCIENTIFIC ILLUSTRATION I (3). Further exploration of the technical and aesthetic aspects of scientific illustration. Students work in laboratories of NIU scientists, illustrating research being performed. PRQ: ARTS 340.

ARTS 440. ADVANCED SCIENTIFIC ILLUSTRATION II (3). Advanced study and application of contemporary techniques of scientific illustration. Students continue to work in laboratories of NIU scientists, illustrating research being performed. May be repeated. PRQ: ARTS 439.

ARTS 441A. INTERMEDIATE HAND-BUILDING CERAMICS (3). Studio work in clay and other related materials with emphasis on individually assigned problems involving hand-building techniques and technical processes. Compounding studio clay bodies and glazes, firing electric and gas kilns. PRQ: ARTS 347 or consent of school.

ARTS 441B. INTERMEDIATE WHEEL-THROWING CERAMICS (3). Studio work in clay and other related materials with emphasis on individually assigned problems involving wheel-throwing techniques and technical processes. Compounding studio clay bodies and glazes, firing electric and gas kilns. PRQ: ARTS 347 or consent of school.

ARTS 446. ADVANCED CERAMICS(3 or 6). Studio work with clay in various traditional and contemporary techniques with emphasis on problems selected for the individual student. Compounding of individual clay bodies and glazes, loading and firing, studio management. May be repeated. PRQ: ARTS 441A and ARTS 441B, or consent of school.

ARTS 447. COMPUTER RASTER APPLICATIONS FOR ILLUSTRATION (3). Study of the role of computer painting programs in illustration and the development/rendition of illustration concepts in commercial, editorial, and publishing venues using pixel, resolution-dependent software. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 215 and ARTS 437A.

ARTS 448. COMPUTER VECTOR APPLICATIONS FOR ILLUSTRATION (3). Study of the role of computer drawing programs in illustration and the development/rendition of illustration concepts in commercial, editorial, and publishing venues using object, resolution-independent software. May be repeated to a maximum of 9 semester hours. PRQ: ARTD 215 and ARTS 437A.

ARTS 451. ADVANCED METALWORK AND JEWELRY (3 or 6). Intensive studio work in individually assigned techniques and processes. May be repeated. PRQ: ARTS 352 and successful completion of sophomore portfolio review in metalwork and jewelry, or consent of school.

ARTS 452. ADVANCED RESEARCH IN METALWORK AND JEWELRY(3 or 6). Studio research on specific techniques or processes selected in conference with instructor. Written or oral report required. May be repeated. CRQ: ARTS 451.

ARTS 453. BEGINNING ENAMELING (3). Study of enameling on metal utilizing traditional and experimental techniques. PRQ: ARTS 351.

ARTS 454. ADVANCED ENAMELING (3). Further exploration of enameling techniques and their application to the visual arts. PRQ: ARTS 352 and ARTS 453.

ARTS 456. TECHNICAL STUDIO (3). Intensive study of one sculpture process per semester. Technical focus rotates between wood, metal, and bronze casting. May be repeated to a maximum of 9 semester hours. PRQ: ART 101 and ART 102.

ARTS 461. ADVANCED SCULPTURE I (3). Development of a cohesive body of work for exhibition, slide documentation, and a written statement about the student's work. Opportunity for intensive study and studio work. Studio, research, and lecture. PRQ: ARTS 364.

ARTS 462. ADVANCED SCULPTURE II (3). Continuation of ARTS 461. Studio, research, and lecture. May be repeated to a maximum of 9 semester hours. PRQ: ARTS 461.

ARTS 470. INTERMEDIATE/ADVANCED FIBER STUDIO (3 or 6).
A. Weaving. PRQ: ARTS 371
B. Surface Exploration of Fabric. PRQ: ARTS 372
C. 3-D Forms in Fiber. PRQ: ARTS 374
D. Papermaking. PRQ: ARTS 368
Individual exploration in any area of fiber curriculum with emphasis on the development of personal themes. Students expand their exploration across the fiber curriculum to create an integrated body of work. In addition to studio projects, advanced students develop an artist's statement and document their work in slides. Studio, lecture, readings, and discussion. May be repeated to a maximum of 27 semester hours. Credit in more than one area during a semester is permitted.

Art Faculty

Adrian Tió, M.F.A., University of Cincinnati, professor, director
Jeffrey Adams, M.F.A., Cranbrook Academy of Art, associate professor
Leif Allmendinger, M.F.A., Rhode Island School of Design, associate professor
Jon Ashmann, B.S., Illinois Institute of Technology, professor
Michael Barnes, M.F.A., University of Iowa, associate professor
Douglas G. Boughton, Ph.D., University of Alberta (Canada), professor
Karen Brown, M.F.A., California State University at Fullerton, associate professor
Todd Buck, M.S.M.E., University of Illinois, Chicago, assistant professor
Andrew Byrom, B. Tec. National Diploma, Cumbria College of Art and Design (England), associate professor
Yale Factor, M.F.A., East Texas State University, professor
Kerry Freedman, Ph.D., University of Wisconsin, professor
Billie Giese, M.F.A., University of Kansas, assistant professor
Aleksandra Giza, Ph.D., Silesian University (Katowice, Poland) associate professor
Debra Grall, M.F.A., University of Wisconsin, associate professor
Lawrence J. Gregory, M.F.A., Ohio University, associate professor
Manuel Hernandez, M.F.A., Northern Illinois University, associate professor
Rebecca Houze, Ph.D., University of Chicago, assistant professor
Barbara Jaffee, Ph.D., University of Chicago, associate professor
Katherine Kahn, M.F.A., Yale University, associate professor
Jeff K. Kowalski, Ph.D., Yale University, professor
Frank Kulesa, M.F.A., Northern Illinois University, associate professor
Yih-Wen Kuo, M.F.A., Southern Illinois University, professor
Andrew Liccardo, M.F.A., Texas Tech University, assistant professor
Christine LoFaso, M.F.A., School of the Art Institute of Chicago, associate professor
Kimberly Martens, M.S.M.E., University of Illinois, Chicago, associate professor
Ronald Mazanowski, M.F.A., University of Wisconsin, professor
Helen Nagata, Ph.D., Stanford University, assistant professor
Ashley Nason, M.F.A., University of Tennessee, assistant professor
James Obermeier, M.F.A., Indiana University, assistant professor
Mary Quinlan, Ph.D., University of Chicago, associate professor
Steven Quinn, B.Ed., University of Colorado, associate professor
Catherine Raymond, Ph.D., Sorbonne Paris (France), associate professor
Charlotte Rollman, M.F.A., University of Illinois, professor
Kurt Schultz, M.F.A., Northern Illinois University, associate professor
John Senseney, Ph.D., University of California, Santa Barbara, assistant professor
Lee Sido, M.F.A., Northern Illinois University, associate professor
Deborah Smith-Shank, Ph.D., Indiana University, professor
Mary Stewart, M.F.A., Indiana University, associate professor
Frank Trankina, M.F.A., School of the Art Institute of Chicago, associate professor
Elizabeth Vallance, Ph.D., Stanford University, associate professor
Ann van Dijk, Ph.D., Johns Hopkins University, assistant professor
Harry J. Wirth, B.S., University of Wisconsin, Milwaukee, professor

School of Music (MUSC)

Admission to programs in the School of Music is limited. See "Limited Admissions and Limited Retention Requirements" in the Admission section of this catalog.

The School of Music offers a Bachelor of Music (B.M.) degree with emphases in music education, performance, and composition and a Bachelor of Arts (B.A.) degree for students whose interests lie in acquiring a broad, liberal education.

Audition Procedures

Undergraduate admission for music majors is a two-part procedure. Every student must be accepted by the Office of Admissions and the School of Music in order to pursue a degree. The School of Music accepts students after they have successfully completed an audition, interview, and basic musicianship screening. While students may designate themselves as intended music majors when applying to the university, they do not formally achieve that status until all of the above procedures have been completed successfully. Students who wish to enroll in the composition emphasis must also submit written examples of their works. Prospective students may contact the School of Music for regularly scheduled audition and screening dates. Performance study is available in voice, piano, organ, woodwinds, brass, percussion, strings, guitar, and harp.

Requirements

Music majors are expected to attend a specified number of recitals, concerts, and convocations. Music majors must attain a minimum grade of C in all 100- and 200-level music courses required for graduation in their degree program.

Depending on the emphasis chosen, all senior music majors are required to present a full or partial recital, submit a composition or research project, or complete an equivalent assignment. No credit is awarded.

Major in Music (B.M.)

Core Requirements (20-21)

MUSC 99 - Recital Attendance (0)
MUSC 101 and MUSC 102 - Music Theory I and II (4)
MUSC 103 and MUSC 104 - Aural Skills I and II (2)
MUSC 201 and MUSC 202 - Music Theory III and IV (4)
MUSC 203 and MUSC 204 - Aural Skills III and IV (2)
(Students in the jazz studies area of study must substitute MUSC 266 and MUSC 267, Aural Foundations of Improvisation I and II (2), for MUSC 203 and MUSC 204.)
MUSC 301 - Music Theory V (2),
OR MUSC 323 - 20th Century Music (3)
MUSC 321 and MUSC 322 - History and Literature of Music I and II (6)

Emphasis 1. Music Education

Requirements in School (83-86)

Core requirements (20-21)
MUSC 175 - Introduction to Music Education/Field Experience in Public Schools (1)
MUSC 176 - Music Education Convocation (1)
MUSC 275 - Elementary General Music Methods (4)
MUSC 371 - Middle School/Junior High Music Methods (4)
MUSC 372 - Secondary Music Methods (4)
MUSC 484[1] - Student Teaching K-12 (12)
One of the following areas of study (37-39)

Instrumental Music (37-38)

MUSC 140A[2] - Piano: Secondary: Beginning Group (1)
MUSC 140B[2] - Piano: Secondary: Intermediate Group (1)
MUSC 170 - Instrumental Techniques and Materials: Flute, Clarinet, and Saxophone (1)
MUSC 171 - Instrumental Techniques and Materials: Brass (1)
MUSC 172 - Instrumental Techniques and Materials: Percussion (1)
MUSC 173 - Instrumental Techniques and Materials: Double Reeds (1)
MUSC 174 - Instrumental Techniques and Materials: Strings (1)
MUSC 305 - Orchestration (2),
OR MUSC 307 - Wind and Percussion Scoring (2)
MUSC 360 - Conducting I (2)
MUSC 361 - Conducting II: Instrumental (2),
OR MUSC 362 - Conducting III: Choral (2)
MUSC 394 - University Chorus (1),
OR MUSC 144 - Voice: Secondary (1)
Theory and composition and/or history and literature courses (2-3)
200-level private instrumental study (8)
300-level private instrumental study (6)
Ensembles (7)
- MUSC 391 - Instrumental Ensemble (1)
- MUSC 393A [3] - Huskie Bands: Marching Band (1)
- Course work from the following (4-5)
  - MUSC 392 - University Bands (1)
  - MUSC 393A [4] - Huskie Bands: Marching Band (1)
  - MUSC 397 - Orchestra (1)
- Other ensemble courses (1)

MUSC 399A - Senior Recital (0)

Vocal Music (37-38)

MUSC 140A[2] - Piano: Secondary: Beginning Group (1)
MUSC 140B[2] - Piano: Secondary: Intermediate Group (1)
MUSC 140C[2] - Piano: Secondary: Advanced Group (2)
MUSC 244 - Voice: Primary (8)
MUSC 261 - Diction for Singers I (2)
MUSC 262 - Diction for Singers II (2)
MUSC 305 - Orchestration (2),
OR MUSC 307 - Wind and Percussion Scoring (2)
MUSC 344 - Voice: Primary (6)
MUSC 360 - Conducting I (2)

* Available for general education credit.
[1] Application for student teaching must be made through the School of Music during the academic year which precedes registration in student teaching.
[2] MUSC 140E, Individual Instruction in Piano, may be substituted for any group piano requirement with the consent of the piano faculty.
[3] Required of wind and percussion students only, and must be taken during fall semester for degree credit.
[4] Fall semester only for degree credit

MUSC 362 - Conducting III: Choral (2)
Theory and composition and/or history and literature courses (2-3)
Ensembles (7)
  Course work from the following (5)
    MUSC 390 - Vocal Ensemble (1)
    MUSC 394 - University Chorus (1)
    MUSC 395 - Concert Choir (1)
  Other ensemble courses (2)
MUSC 399A - Senior Recital (0)

General Music (37-39)

MUSC 144 - Voice: Secondary (4)
MUSC 211 - Electronic and Computer Music I (2),
  OR MUSC 324 - Introduction to World Music I (3),
  OR MUSC 325 - Introduction to World Music II (3)
MUSC 305 - Orchestration (2),
  OR MUSC 307 - Wind and Percussion Scoring (2)
MUSC 308 - Choral Arranging (2)
MUSC 360 - Conducting I (2)
MUSC 361 - Conducting II: Instrumental (2),
  OR MUSC 362 - Conducting III: Choral (2)
Theory and composition and/or history and literature courses (2-3)
200-level private keyboard study (8)
300-level private keyboard study (6)
Ensembles (7)
  Course work from the following (5)
    MUSC 390 - Vocal Ensemble (1)
    MUSC 392 - University Bands (1)
    MUSC 393A [4] - Huskie Bands: Marching Band (1)
    MUSC 394 - University Chorus (1)
    MUSC 395 - Concert Choir (1)
    MUSC 397 - Orchestra (1)
  Other ensemble courses (2)
MUSC 399A - Senior Recital (0)

Requirements outside School

*EPFE 201 - Education as an Agent for Change (3),
  OR *IDSP 211 - Educating for Cultural Sensitivity (3)
EPFE 400 - Foundations of Education (3)
EPS 405 - Issues in Human Development in the Elementary Through High School Years (3)
ETR 440 - Secondary Classroom Assessment (3)
*PSYC 102 - Introduction to Psychology (3)
TLSE 457 - Systems for Integrating the Exceptional Student in the Regular Classroom (3)
Fulfillment of requirements for Standard Special Teacher Certificate (See the "Teacher Certification Requirements" section of this catalog.)

Special requirements. Students not obtaining a grade of C or better in the general education core competency courses must successfully complete the PRAXIS I test. A minimum NIU cumulative GPA of 2.50 or consent of school is required for enrollment in MUSC 275, MUSC 371, MUSC 372, and MUSC 484, and a grade of C or better is required for successful completion of MUSC 175, MUSC 275, MUSC 371, MUSC 372, and MUSC 484. Students must also pass a portfolio review.

To be considered for full admission into the music education professional course of study, students must receive a grade of C or better in MUSC 175 and MUSC 275 and maintain a minimum cumulative NIU GPA of 2.50. Admission will be reviewed by means of an interview with music education faculty during the term of enrollment in MUSC 275. Following full admission, students falling below the required cumulative GPA will not be permitted to continue in the teacher certification program, although they may appeal in writing for one probationary semester to the area coordinator of music education.

Emphasis 2. Performance

Requirements in School (78-81)

Core requirements (20-21)
One of the following areas of study (58-60)

Keyboard Music (58-60)

200-level private keyboard study (16)
300-level private keyboard study (16)
MUSC 365 - Accompanying (1)
MUSC 435 and MUSC 436 - Organ Literature I and II (4),
  OR MUSC 437 and MUSC 438 - Piano Literature I and II (4)
Theory and composition courses (2-3)
History and literature courses (2-3)
Ensembles (8)
MUSC 360 - Conducting I (2)
Other music courses (7)
MUSC 399A - Senior Recital (0)

Special requirements. Before the senior year, all students in the keyboard area of study must either complete keyboard skills classes (MUSC 268A and MUSC 268B) with a grade of C or better or pass a keyboard skills proficiency examination. Requirements for students whose primary keyboard instrument is harpsichord are MUSC 437, Piano Literature I (2), and other music courses (9).

Vocal Music (58-60)

MUSC 140A[2] - Piano: Secondary: Beginning Group (1)
MUSC 140B[2] - Piano: Secondary: Intermediate Group (1)
MUSC 140C[2] - Piano: Secondary: Advanced Group (2)
MUSC 244 - Voice: Primary (16)
MUSC 261 and MUSC 262 - Diction for Singers I and II (4)
MUSC 344 - Voice: Primary (16)
MUSC 360 - Conducting I (2)
Theory and composition courses (2-3)
History and literature courses (2-3)
Ensembles (12)
  Course work from the following (6)
    MUSC 394 - University Chorus (1)
    MUSC 395 - Concert Choir (1)
  Ensemble courses (6)
MUSC 399A - Senior Recital (0)

Special requirements. Before graduation, all students in the vocal area of study must demonstrate a foreign language proficiency equivalent to one year of college instruction in French, Italian, or German. The student can fulfill this requirement by presenting documented proof of at least two years of high school foreign language instruction in French, Italian, or German with an average grade of C or better; demonstrating competency through a proficiency examination; or completing a one-year foreign language sequence (i.e., FLFR 101-FLFR 102, FLIT 101-FLIT 102, or FLGE 101-FLGE 102) in the Department of Foreign Languages and Literatures.

Instrumental Music (58-60)

200-level private instrumental study (16)
300-level private instrumental study (16)
MUSC 140A[2] - Piano: Secondary: Beginning Group (1)
MUSC 140B[2] - Piano: Secondary: Intermediate Group (1)
MUSC 305 - Orchestration (2),
  OR MUSC 307 - Wind and Percussion Scoring (2)
MUSC 360 - Conducting I (2)
MUSC 361 - Conducting II: Instrumental (2)
Theory and composition courses (2-3)
History and literature courses (2-3)
Other music courses (2)
Ensembles (12)

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* Available for general education credit.
[1] Application for student teaching must be made through the School of Music during the academic year which precedes registration in student teaching.
[2] MUSC 140E, Individual Instruction in Piano, may be substituted for any group piano requirement with the consent of the piano faculty.
[3] Required of wind and percussion students only, and must be taken during fall semester for degree credit.
[4] Fall semester only for degree credit

Course work from the following (8)
MUSC 391 - Instrumental Ensemble (1)
MUSC 392 - University Bands (1)
MUSC 397 - Orchestra (1)
Other ensemble courses (4)
MUSC 399A - Senior Recital (0)

Note. Requirements for students whose primary interest is guitar are ensembles (8); MUSC 439 - Guitar Literature (2); MUSC 163 - Guitar Skills I (2); and other music courses (2)

Jazz Studies (58-60)

200-level private keyboard or instrumental study (8)
300-level private keyboard or instrumental study (8)
MUSC 140G[2] - Piano: Secondary: Level 1 Group Jazz Piano (1)
MUSC 140J[2] - Piano: Secondary: Level 2 Group Jazz Piano (1)
MUSC 205 - Jazz Theory (2)
MUSC 230 - Jazz Literature (2)
MUSC 260 - Introduction to Jazz Studies (2)
MUSC 309 - Jazz Arranging I (2)
MUSC 310 - Jazz Arranging II (2)
MUSC 360 - Conducting I (2)
MUSC 367A and MUSC 367B - Jazz Improvisation I and II (4)
MUSC 477 - Jazz Pedagogy (3)
Course work from the following (4-5)
MUSC 211 - Electronic and Computer Music I (2)
MUSC 400 - Recording Techniques (3)
MUSC 462 - Survey of the Music Industry (2)
A world music course (3)
Other music courses (2-3)
Ensembles (12)
MUSC 392 - University Bands, OR MUSC 397 - Orchestra (4)
MUSC 391U - Instrumental Ensemble: Jazz Combo, OR MUSC 396 - Jazz Ensemble (6)
Other Ensembles (2)
MUSC 399A - Senior Recital (0)

Note. Ensemble requirements for students whose primary instrument is keyboard are MUSC 391U, Instrumental Ensemble: Jazz Combo, OR MUSC 396, Jazz Ensemble (6); MUSC 394, University Chorus, OR MUSC 395, Concert Choir (2); MUSC 398, World Music Ensemble (2); ensemble electives (2). Credits earned in fulfilling the ensemble requirements may not be used to fulfill the world music requirement.

Requirements for students whose primary instrument is guitar are MUSC 163, Guitar Skills I (2); MUSC 164, Guitar Improvisation I (2); MUSC 263, Guitar Skills II (2); MUSC 264, Guitar Improvisation II (2); MUSC 349, Guitar: Primary (6), MUSC 391G, Instrumental Ensemble: Guitar Ensemble (4); MUSC 391U, Instrumental Ensemble: Jazz Combo, OR MUSC 396, Jazz Ensemble (6); MUSC 394, University Chorus, OR MUSC 395, Concert Choir (2).

Total Hours for Emphasis 2, Performance: 78-81

Emphasis 3. Composition

Requirements in School (78-80)

Core requirements (20-21)
Approved courses in consultation with faculty adviser (36-37)
200-level private keyboard, instrumental, or voice study (8)
300-level private keyboard, instrumental, or voice study (4)
Ensembles (6)
Other music courses (4)
MUSC 399B - Senior Research Project or Composition (0)

Special requirement. Before the senior year, all students in this emphasis must either complete at least two semesters of keyboard study or pass a keyboard proficiency examination at the intermediate level.

Total Hours for Emphasis 3, Composition: 78-80

Major in Music (B.A.)

At least 75 hours (including general education course work) required for the B.A. degree must be taken in subjects other than music. Elective courses under this program should be chosen in consultation with the student's adviser.

Requirements in School (46-48)

MUSC 99 - Recital Attendance (0)
MUSC 101 and MUSC 102 - Music Theory I and II (4)
MUSC 103 and MUSC 104 - Aural Skills I and II (2)
MUSC 201 and MUSC 202 - Music Theory III and IV (4)
MUSC 203 and MUSC 204 - Aural Skills III and IV (2)
MUSC 301 - Music Theory V (2),
OR MUSC 323 - 20th Century Music (3)
MUSC 321 and MUSC 322 - History and Literature of Music I and II (6)
Theory and composition and/or history and literature courses (2-3)
Private keyboard, instrumental, or voice study (16)
Ensembles (8)
MUSC 399A - Senior Recital (0),
OR MUSC 399B - Senior Research Project or Composition (0)

Requirements outside School (0-12)

Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Total Hours for a Major in Music (B.A.): 46-60

Cooperative Education/Internship in Music

Music majors of upper-division standing are eligible to submit an application for a cooperative education/internship experience. Those students selected for the program may work full or part time with approved employers complementary to students' career goals. Accredited experiences include composition and arranging (MUSC 413A), recording techniques (MUSC 413B), performance (MUSC 463A), and a variety of areas within the music industry (MUSC 463B). Variable S/U credit assigned on the basis of the length and/or nature of employment. Credit does not apply towards requirements in a major in music, and students are limited to a maximum of 8 semester hours of cooperative education/internship credit in the School of Music.

Interested students should consult with a faculty member closely associated with the appropriate field. As the student approaches junior academic standing, he or she may apply to the School of Music for participation in NIU's Cooperative Education/Internship Program. Applications will be reviewed on the basis of academic GPA, instructor recommendation(s), professional promise, and demonstrated interest and competence in the area of study. The student must possess a minimum 2.50 overall GPA with a minimum 3.00 GPA in course work offered by the School of Music. All students (including transfers) must have completed a minimum of 12 semester hours in the School of Music.

All internships are approved by the School of Music and coordinated by the Cooperative Education/Internship Program. The latter office requires completion of an application and resume. These courses may be taken concurrently with or following regular curricular offerings in the classroom such as MUSC 462, Survey of the Music Industry.

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* Available for general education credit.
[1] Application for student teaching must be made through the School of Music during the academic year which precedes registration in student teaching.
[2] MUSC 140E, Individual Instruction in Piano, may be substituted for any group piano requirement with the consent of the piano faculty.
[3] Required of wind and percussion students only, and must be taken during fall semester for degree credit.
[4] Fall semester only for degree credit

Course List

Music History and Literature

220. INTRODUCTION TO MUSIC (3). To broaden the non-music major's understanding of music as a subject related to other arts and sciences. Classwork is divided broadly into two activities: study of music fundamentals, rhythmic structure, and form; and listening lessons arranged to illustrate the evolution of music. Not open to music majors.

230. JAZZ LITERATURE (2). Aural analysis of jazz literature using the music of Count Basie, Gil Evans, Duke Ellington, Miles Davis, and others. PRQ: Grade of C or better in MUSC 102 and MUSC 104.

321. HISTORY AND LITERATURE OF MUSIC I (3). Development of music in the Western world from its origins through the rococo period. PRQ: Grade of C or better in MUSC 202.

322. HISTORY AND LITERATURE OF MUSIC II (3). Continuation of MUSC 321. Development of music in the Western world from the classical period through ca. 1950. PRQ: Grade of C or better in MUSC 202.

323. 20TH CENTURY MUSIC (3). Survey of European and American music from impressionism to the present. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

324. INTRODUCTION TO WORLD MUSIC I (3). *Crosslisted as ANTH 324X.* Survey of the folk and traditional music in Third World cultures. Examination of the relationship of music to selected aspects of the people and culture of South Asia, Southeast Asia, East Asia, and Oceania. PRQ: Junior standing or consent of school.

325. INTRODUCTION TO WORLD MUSIC II (3). *Crosslisted as ANTH 325X.* Survey of the folk and traditional music in European and Third World cultures. Examination of the relationship of music to selected aspects of the people and culture of the Middle East, Eastern Europe, Europe, Africa, and the Americas. PRQ: Junior standing or consent of school.

337. CHAMBER MUSIC LITERATURE (3). Chamber music from the baroque to the present day. PRQ: Consent of school.

339. SELECTED STUDIES IN MUSIC: MUSIC HISTORY AND LITERATURE(1 to 4). Independent or small group study of selected topics of interest or need in music. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

421. TOPIC STUDIES IN ETHNOMUSICOLOGY (3). Studies and reports on special topics in world music: bibliography, discography, and instruments. May be repeated to a maximum of 6 semester hours. PRQ: MUSC 324 or MUSC 325, or consent of school.

422. JAZZ HISTORY (3). Significant changes and developments in jazz. Analysis of the styles of a number of jazz performers. PRQ: MUSC 230.

423. BLACK MUSIC (3). Historical examination of black music from 1619 to the present. Analysis of musical styles including blues, rag, jazz, rhythm and blues, and soul, within the social and cultural context of American life. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

426. AMERICAN MUSIC IN THE CONCERT TRADITION (3). Development of solo, chamber, symphonic, and choral music, and opera from the Moravians of Colonial America to the American experimental composers of the 20th century. PRQ: MUSC 321.

427. AMERICAN MUSIC IN THE FOLK AND POPULAR TRADITIONS (3). Survey of American vernacular and popular music since colonial times including folk songs and spirituals, the music of New England tunesmiths, music for social and entertainment purposes, and an introduction to the music of native Americans. PRQ: MUSC 321.

431. MUSIC OF SOUTHEAST ASIA (3). Study of the music of Southeast Asia with emphasis on the music of Indonesian gamelan. PRQ: Consent of school.

432. MUSIC OF CHINA (3). Study of the music of China with emphasis on existing genres. PRQ: Consent of school.

433. CHORAL LITERATURE I (2). Survey of choral literature from 1400 to 1750. PRQ: Consent of school.

434. CHORAL LITERATURE II (2). Survey of choral literature from 1750 to present. PRQ: consent of school.

435. ORGAN LITERATURE I (2). Survey of organ literature from 1300 to 1750, including the works of J. S. Bach. PRQ: At least junior standing in keyboard area of study.

436. ORGAN LITERATURE II (2). Survey of organ works after J. S. Bach including classical, romantic, and contemporary literature. PRQ: At least junior standing in keyboard area of study.

437. PIANO LITERATURE I (2). Survey of clavier and piano literature to the mid-19th century. CRQ: MUSC 340 or consent of school.

438. PIANO LITERATURE II (2). Survey of romantic and contemporary piano literature. CRQ: MUSC 340 or consent of school.

439. GUITAR LITERATURE (2). Survey of lute, vihuela, and guitar literature from the Renaissance to the present. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

Music Theory and Composition

100. FUNDAMENTALS OF MUSIC THEORY (3). Written and aural introduction to the rudiments of music, including notation, rhythm and meter, major and minor scales, intervals, triads and seventh chords, key signatures, harmonic function, and phrase structure. May be restricted to music majors only, but may not be counted towards any degree offered by school.

101. MUSIC THEORY I (2). Introductory study of music theory from fundamentals to diatonic harmony; introduction to part-writing and analysis. Open only to music majors. PRQ: Consent of school.

102. MUSIC THEORY II (2). Continuation of MUSC 101. Study of diatonic harmony, with emphasis on part-writing and analysis of tonal music. Open only to music majors. PRQ: Grade of C or better in MUSC 101.

103. AURAL SKILLS I (1). Development of proficiency in eartraining and sightsinging. Introductory studies in moveable *do* solfege. PRQ: Consent of school. CRQ: MUSC 101.

104. AURAL SKILLS II (1). Continuation of MUSC 103. Development of proficiency in eartraining and sightsinging. Studies in moveable *do* solfege. PRQ: Grade of C or better in MUSC 103. CRQ: MUSC 102.

200. COMPOSITION: SECONDARY (1). Introductory studies in the techniques of composing for acoustic media. May be repeated.

201. MUSIC THEORY III (2). Continuation of MUSC 102. Study of chromatic harmony, with emphasis on part-writing and analysis of tonal music. Open only to music majors. PRQ: Grade of C or better in MUSC 102.

202. MUSIC THEORY IV (2). Continuation of MUSC 201. Application of prior studies to analysis of formal design in tonal music. Open only to music majors. PRQ: Grade of C or better in MUSC 201.

203. AURAL SKILLS III (1). Continuation of MUSC 104. Development of proficiency in eartraining and sightsinging. Studies in moveable *do* solfege. PRQ: Grade of C or better in MUSC 104. CRQ: MUSC 201.

204. AURAL SKILLS IV (1). Continuation of MUSC 203. Development of proficiency in eartraining and sightsinging. Studies in moveable *do* solfege. PRQ: Grade of C or better in MUSC 203. CRQ: MUSC 202.

205. JAZZ THEORY (2). Development and application of the fundamentals and rudiments of music as related to jazz. Open only to students choosing the jazz studies area of study or by consent of school. PRQ: MUSC 102.

211. ELECTRONIC AND COMPUTER MUSIC I (2). Laboratory introduction to the techniques of electronic music composition. Emphasis on tape techniques and analog and digital synthesis.

212. ELECTRONIC AND COMPUTER MUSIC II (2). Further study and experimentation with techniques introduced in MUSC 211. Emphasis on implementing techniques studies thus far in more extensive electronic music compositions. PRQ: MUSC 211.

300. COMPOSITION: PRIMARY (4). Individualized and/or group study and writing of small and large musical forms. May be repeated. PRQ: Grade of C or better in MUSC 202, grade of C or better in either MUSC 204 or MUSC 267, and consent of school.

301. MUSIC THEORY V (2). Continuation of MUSC 202. Study of 20th century compositional and analytical techniques, approached

from a historical perspective. Development of skills to analyze and understand representative works. PRQ: Grade of C or better in MUSC 202, and grade of C or better in MUSC 204 or MUSC 267.

305. ORCHESTRATION (2). Basic techniques of arranging music for orchestras and small ensembles. PRQ: Grade of C or better in MUSC 202, and grade of C or better in MUSC 204 or MUSC 267.

307. WIND AND PERCUSSION SCORING (2). Comprehensive course in scoring for wind and percussion ensembles. PRQ: Grade of C or better in MUSC 202, and grade of C or better in MUSC 204 or MUSC 267.

308. CHORAL ARRANGING (2). Comprehensive course in scoring for vocal ensembles. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

309. JAZZ ARRANGING I (2). Scoring techniques for jazz and popular ensembles. PRQ: Grade of C or better in MUSC 202, MUSC 205, and grade of C or better in MUSC 204 or MUSC 267; or consent of school.

310. JAZZ ARRANGING II (2). Continuation of MUSC 309. Advanced scoring techniques for jazz and popular ensembles. PRQ: MUSC 309.

311. ELECTRONIC AND COMPUTER MUSIC III (2). Laboratory introduction to algorithmic composition. Study of how composers have used computers to create and perform musical works. Emphasis on the design of original algorithms and their use in the composition/performance of music works. PRQ: MUSC 212 or consent of school.

312. ELECTRONIC AND COMPUTER MUSIC IV (2). Further study and experimentation with algorithmic composition. Emphasis on creating more expansive computer music systems through the integration of hardware and software. PRQ: MUSC 311 or consent of school.

313. SOFTWARE SYNTHESIS AND DIGITAL AUDIO PROCESSING (3). Musical composition using software synthesis and digital audio processing techniques. Projects can also include personal and network media as well as the creation of both musical compositions and original software components. May be repeated to a maximum of 12 semester hours. PRQ: Consent of school.

319. SELECTED STUDIES IN MUSIC: MUSIC THEORY(1 to 4). Independent or small group study of selected topics of interest or need in music other than music composition. May be repeated to a total of 6 semester hours. PRQ: Consent of school.

400. RECORDING TECHNIQUES (3). Laboratory study of the techniques of professional recording as applied directly to all phases of musical storage and reproduction. Emphasis on gaining expertise with microphones, acoustics, multitrack recording, professional mixing techniques, etc. PRQ: Ability to read music and consent of school.

401. ADVANCED RECORDING PROJECTS (3). Continuation of MUSC 400. Microphone theory and applications, audio console operation including, but not restricted to, signal processing, monitor mixing, overdubbing, and multitrack techniques; preparation of master tape suitable for disc recording; some study of current practices in digital recording and console automation. May be repeated. PRQ: MUSC 400.

407. MODAL COUNTERPOINT (3). Class performance, analysis, and writing of counterpoint in Renaissance style as exemplified by works of such composers as Josquin, Lassus, and Palestrina. Preliminary study of Gregorian chant. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

409. TONAL COUNTERPOINT (3). Class performance, analysis, and writing of counterpoint as employed in 18th century style. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

412. DEVELOPMENT AND PRACTICE OF ELECTRONIC MUSIC (3). Comprehensive examination of the development and practices of all phases of electronic and computer music with both historical and projected examinations of applications in composition, performance, and research. PRQ: Consent of school.

413. INTERNSHIP IN MUSIC (2 to 8).
A. Composition and Arranging
B. Recording Techniques
Cooperatively supervised, full- or part-time professional field experience with approved organizations/individuals, to provide a learning experience complementary to the student's anticipated career goals. May be repeated to a maximum of 8 semester hours, not applicable towards requirements in a major in music. S/U grading. PRQ: Consent of school.

418. PHYSICS OF MUSICAL INSTRUMENTS AND SOUND (3). Science of musical sound and physical principles involved in the production of music by various instruments and the voice. Elements of architectural acoustics of music rooms and acoustical engineering of electronic recorders and reproducers. PRQ: Consent of school.

Music Performance

99. RECITAL ATTENDANCE (0). Student recitals and concerts. Required of all undergraduate music majors each semester of enrollment for up to 7 semesters. Not required of students in the music education emphasis during their semester of student teaching. S/U grading.

140. PIANO: SECONDARY (1).
A. Beginning Group Piano. Music majors only.
B. Intermediate Group Piano. Music majors only.
C. Advanced Group Piano. Music majors only.
D. Group Piano. Non-music majors only.
E. Individual Instruction in Piano. May be repeated with consent of school.
G. Level 1 Group Jazz Piano.
J. Level 2 Group Jazz Piano.
K. Individualized Instruction in Jazz Piano. May be repeated with consent of school.
Emphasis on performance, with proficiency requirements at each level. PRQ: Consent of school.

141. ORGAN: SECONDARY (1)
142. HARPSICHORD: SECONDARY (1)
143. HARP: SECONDARY (1)
144. VOICE: SECONDARY (1). CRQ: MUSC 394 or MUSC 395.
145. VIOLIN: SECONDARY (1)
146. VIOLA: SECONDARY (1)
147. VIOLONCELLO: SECONDARY (1)
148. CONTRABASS: SECONDARY (1)
149. GUITAR: SECONDARY (1)
150. FLUTE: SECONDARY (1)
151. OBOE: SECONDARY (1)
152. CLARINET: SECONDARY (1)
153. SAXOPHONE: SECONDARY (1)
154. BASSOON: SECONDARY (1)
155. TRUMPET: SECONDARY (1)
156. FRENCH HORN: SECONDARY (1)
157. TROMBONE: SECONDARY (1)
158. TUBA AND EUPHONIUM: SECONDARY (1)
159. PERCUSSION: SECONDARY (1).
Emphasis on performance, with proficiency requirements. Individual and/or group instruction. Open to non-music majors by special consent of school. May be repeated.

163. GUITAR SKILLS I (1). Development of guitar skills through the study of various musical styles. Emphasis on chordal guitar playing. May be repeated.

164. GUITAR IMPROVISATION I (1). Development of guitar skills through the study of single-note improvisation. May be repeated.

240. PIANO: PRIMARY (1 to 4). Keyboard students only.
241. ORGAN: PRIMARY (1 to 4). Keyboard students only.
242. HARPSICHORD: PRIMARY (1 to 4). Keyboard students only.
243. HARP: PRIMARY (1 to 4). Harp students only.
244. VOICE: PRIMARY (1 to 4). Voice students only.
Emphasis on performance, with proficiency requirements at each level. Two semester hours' credit per semester for students in the music education emphasis; 4 semester hours' credit per semester (2 in summer) for students in the performance emphasis. May be repeated. Students registered for MUSC 244 may not concurrently register for MUSC 390 without the permission of the MUSC 244 instructor. CRQ: MUSC 261, MUSC 262, and MUSC 394 or MUSC 395.

245. VIOLIN: PRIMARY (1 to 4)
246. VIOLA: PRIMARY (1 to 4)
247. VIOLONCELLO: PRIMARY (1 to 4)
248. CONTRABASS: PRIMARY (1 to 4)
249. GUITAR: PRIMARY (1 to 4)
250. FLUTE: PRIMARY (1 to 4)
251. OBOE: PRIMARY (1 to 4)

252. CLARINET: PRIMARY (1 to 4)
253. SAXOPHONE: PRIMARY (1 to 4)
254. BASSOON: PRIMARY (1 to 4)
255. TRUMPET: PRIMARY (1 to 4)
256. FRENCH HORN: PRIMARY (1 to 4)
257. TROMBONE: PRIMARY (1 to 4)
258. TUBA AND EUPHONIUM: PRIMARY (1 to 4)
259. PERCUSSION: PRIMARY (1 to 4)
Emphasis on performance, with proficiency requirements at each level. For instrumental students only. Two semester hours' credit per semester for students in the B.M. music education emphasis and in the B.A. degree program; 4 semester hours' credit per semester (2 in summer) for students in the performance emphasis (B.M.). May be repeated.

260. INTRODUCTION TO JAZZ STUDIES (2). Introductory study of jazz music and musicianship. Broad overview of the development of jazz styles, the art of improvisation, important jazz musicians, and the cultural significance of jazz music.

261. DICTION FOR SINGERS I (2). Italian and German pronunciation, using the International Phonetic Alphabet as a basis. Enrollment limited to and required of all voice students.

262. DICTION FOR SINGERS II (2). French and English pronunciation, using the International Phonetic Alphabet as a basis. Enrollment limited to and required of all voice students. PRQ: Grade of C or better in MUSC 261.

263. GUITAR SKILLS II (1). Continuation of MUSC 163. Emphasis on the study of chordal jazz accompaniment and improvisation. May be repeated. PRQ: MUSC 163 or consent of school.

264. GUITAR IMPROVISATION II (1). Continuation of MUSC 164. Emphasis on the development of standard jazz repertoire. May be repeated. PRQ: MUSC 164 or consent of school

266. AURAL FOUNDATIONS OF IMPROVISATION I (1). Aural training through memorization of melodies and bass lines from the standard pop and jazz repertory. Studies to develop interval recognition and the understanding of harmonic implications. No notated music used. PRQ: Grade of C or better in MUSC 104.

267. AURAL FOUNDATIONS OF IMPROVISATION II (1). Continuation of MUSC 266. Further development of skills in melody memorization, aural transposition, chord recognition, and solo etudes. PRQ: Grade of C or better in MUSC 266.

268A. KEYBOARD SKILLS (2). Development of keyboard proficiency in sight-reading, score-reading, and ensemble playing. May be repeated to a maximum of 4 semester hours.

268B. ADVANCED KEYBOARD SKILLS (2). Further development of keyboard proficiency in sight-reading, score-reading, and ensemble playing. May be repeated.

340. PIANO: PRIMARY (2 or 4). Keyboard students only.
341. ORGAN: PRIMARY (2 or 4). Keyboard students only.
342. HARPSICHORD: PRIMARY (2 or 4). Keyboard students only.
343. HARP: PRIMARY (2 or 4). Harp students only.
344. VOICE: PRIMARY (2 or 4). Voice students only. CRQ: MUSC 261, MUSC 262, and MUSC 394 or MUSC 395.
Emphasis on performance, with proficiency requirements at each level. Two semester hours' credit per semester for students in the music education emphasis; 4 semester hours' credit per semester (2 in summer) for students in the performance emphasis. May be repeated. PRQ: Consent of school.

345. VIOLIN: PRIMARY (2 or 4)
346. VIOLA: PRIMARY (2 or 4)
347. VIOLONCELLO: PRIMARY (2 or 4)
348. CONTRABASS: PRIMARY (2 or 4)
349. GUITAR: PRIMARY (2 or 4)
350. FLUTE: PRIMARY (2 or 4)
351. OBOE: PRIMARY (2 or 4)
352. CLARINET: PRIMARY (2 or 4)
353. SAXOPHONE: PRIMARY (2 or 4)
354. BASSOON: PRIMARY (2 or 4)
355. TRUMPET: PRIMARY (2 or 4)
356. FRENCH HORN: PRIMARY (2 or 4)
357. TROMBONE: PRIMARY (2 or 4)
358. TUBA AND EUPHONIUM: PRIMARY (2 or 4)
359. PERCUSSION: PRIMARY (2 or 4)
Emphasis on performance, with proficiency requirements at each level. For instrumental students only. Two semester hours' credit per semester for students in the B.M. music education emphasis and in the B.A. degree program; 4 semester hours' credit per semester (2 in summer) for students in the B.M. performance emphasis. May be repeated. PRQ: Consent of school.

360. CONDUCTING I (2). Basic principles and techniques of conducting. PRQ: Grade of C or better in MUSC 202, and grade of C or better in MUSC 204 or MUSC 267; or consent of school.

361. CONDUCTING II: INSTRUMENTAL (2). Conducting principles and techniques as applied to instrumental ensembles. PRQ: MUSC 360.

362. CONDUCTING III: CHORAL (2). Conducting principles and techniques as applied to vocal ensembles. PRQ: MUSC 360.

363. SPECIAL CONTEMPORARY PERFORMANCE SKILLS: EXPERIMENTAL MUSIC (2). Analysis and class performance of experimental music including the development of skills related to the interpretation of modernized and invented notation, improvisation, and verbal instruction. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

364. SERVICE PLAYING (2). Brief survey of various liturgies. Practicum includes hymn playing, choral and solo accompanying at the organ, conducting from the organ while playing, and accompanying liturgies. PRQ: Grade of C or better in MUSC 202, and grade of C or better in either MUSC 204 or MUSC 267.

365. ACCOMPANYING (1). Practical study of accompanying by pianists as applied to standard solo instrumental and vocal literature. Involves rehearsals and in-class performance with soloists. May be repeated. PRQ: Consent of school.

366. KEYBOARD JAZZ IMPROVISATION (2). Stylistic analysis of contemporary keyboard jazz styles emphasizing the application of these techniques to the standard jazz literature. PRQ: Consent of school.

367A. JAZZ IMPROVISATION I (2). Development of improvisational skills in the jazz idiom through listening, singing, melodic transcription, and chord recognition. Includes performance in lab jazz combos. PRQ: Grade of C or better in MUSC 140G-K or MUSC 240 (jazz section), and grade of C or better in MUSC 260, and MUSC 267.

367B. JAZZ IMPROVISATION II (2). Continuation of MUSC 367A. Extensive study of improvisational techniques. Solo study, transcriptions, listening assignments, aural and theoretical development. PRQ: MUSC 367A.

368. STUDIES OF FOLK AND TRADITIONAL INSTRUMENTS (1).
C. African Instruments
D. Caribbean Instruments
J. Renaissance and Baroque Instruments
K. Indian Instruments
M. Afro-Caribbean Percussion Instruments
Development of skills necessary to play selected instruments from various cultures and historical periods. Individual and/or group study. Participation for credit in more than one category during the same semester permitted. May be repeated. PRQ: Music major.

369. SELECTED STUDIES IN MUSIC: PERFORMANCE (1 to 4). Independent or small group study of selected topics of interest or need in music. May be repeated to a total of 6 semester hours. PRQ: Consent of school.

381. PEDAGOGY OF SINGING (2). Techniques and procedures of teaching vocal production and interpretation in individual and group lessons. Emphasis on current materials in the field. CRQ: MUSC 344.

399A. SENIOR RECITAL (0). Preparation and performance of a full or half recital in accordance with current School of Music guidelines. PRQ: Consent of school.

399B. SENIOR RESEARCH PROJECT OR COMPOSITION (0). Preparation and submission of a research project or composition in accordance with current School of Music guidelines. PRQ: Consent of school.

462. SURVEY OF THE MUSIC INDUSTRY (2). Study of the basic workings of the music business including copyright law, contracts, the record industry, music publishing, artist management, and other music related careers. PRQ: Consent of school.

463. ARTS ORGANIZATIONS IN MUSIC (2 to 8).
A. Performance
B. Music Industry

Cooperatively supervised, full- or part-time professional field experience with approved organizations/individuals, to provide a learning experience complementary to the student's anticipated career goals. Eligible performance areas normally would be limited to those which extend throughout the semester. Music industry areas include (but are not limited to) music publication and production, arts administration and promotion, arts management, and entertainment law. May be repeated to a maximum of 8 semester hours, not applicable towards requirements in a major in music. S/U grading. PRQ: Consent of school.

464. WORKSHOP IN MOVEMENT AND PERFORMING AWARENESS (3). *Crosslisted as TH-D 464X.* Lectures, demonstrations, and related activities regarding the work of Moshe Feldenkrais as it applies to the training of performing artists. S/U grading. PRQ: Junior standing or consent of school.

Ensembles

390. VOCAL ENSEMBLE (1).
A. Chamber Choir
B. Opera Workshop
D. Jazzvox
Study of vocal repertoire as developed through ensemble participation. May be repeated. Participation for credit in more than one ensemble during the same semester permitted. Students registered for MUSC 244 may not concurrently register for MUSC 390 without the permission of the MUSC 244 instructor.

391. INSTRUMENTAL ENSEMBLE (1).
A. String Ensemble
B. Woodwind Ensemble
C. Brass Ensemble
D. Percussion Ensemble
G. Guitar Ensemble
J. Keyboard Ensemble
K. Mixed Ensemble
N. Early Music Ensemble
U. Jazz Combo
V. Latin Jazz Ensemble
Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

392. UNIVERSITY BANDS (1).
A. Wind Symphony
B. Wind Ensemble
C. All-University Band
Open to all university students proficient in the playing of wind and percussion instruments. Participation in both A and B during the same semester permitted. May be repeated.

393. HUSKIE BANDS (1).
A. Marching Band
B. Pep Band
Open to all university students. Participation in both MUSC 393A and MUSC 393B during the same semester permitted. May be repeated.

394. UNIVERSITY CHORUS (1). Open to all students proficient in singing and interested in choral activities. May be repeated.

395. CONCERT CHOIR (1). Study and performance of musical masterworks from the 16th through the 20th century. May be repeated.

396. JAZZ ENSEMBLE (1). Study and performance of the various styles of jazz and popular music. May be repeated.

397. ORCHESTRA (1).
A. NIU Philharmonic
B. Campus String Orchestra
Open to all qualified students. May be repeated.

398. WORLD MUSIC ENSEMBLE (1).
A. Gamelan
C. African Ensemble
D. Steel Band I
J. Steel Band II
K. All University Steel Band
M. Tabla
Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. Open to non-majors by special consent of the School of Music. May be repeated.

Music Education

170. INSTRUMENTAL TECHNIQUES AND MATERIALS: FLUTE, CLARINET, AND SAXOPHONE (1). Development of skills needed to play flute, clarinet, and saxophone. Organization and teaching of woodwind classes in the public schools.

171. INSTRUMENTAL TECHNIQUES AND MATERIALS: BRASS (1). Development of skills needed to play trumpet, French horn, trombone, baritone, and tuba. Organization and teaching of brass classes in the public schools.

172. INSTRUMENTAL TECHNIQUES AND MATERIALS: PERCUSSION (1). Development of skills needed to play percussion instruments. Organization and teaching of percussion classes in the public schools.

173. INSTRUMENTAL TECHNIQUES AND MATERIALS: DOUBLE REEDS (1). Development of skills needed to play oboe and bassoon. Organization and teaching of woodwind classes in the public schools.

174. INSTRUMENTAL TECHNIQUES AND MATERIALS: STRINGS (1). Development of skills needed to play violin, viola, cello, and contrabass. Organization and teaching of string classes in the public schools.

175. INTRODUCTION TO MUSIC EDUCATION/FIELD EXPERIENCE IN PUBLIC SCHOOLS (1). Examination of current philosophies and practices in education and music education to provide students with early perspectives and direction. Directed, supervised observation in a variety of educational settings. Includes seminar and observation in public school classrooms to examine curriculum and methodology. Required of all students in the music education emphasis.

176. MUSIC EDUCATION CONVOCATION (1). Laboratory experience in teaching, conducting, rehearsal techniques, and various other activities related to the development of the music educator. Required of all students in the music education emphasis. S/U grading.

275. ELEMENTARY GENERAL MUSIC METHODS (4). Music materials, learning experiences, and teaching techniques for the general music program in the elementary school. Includes clinical experience in elementary general music settings. PRQ: Grade of C or better in MUSC 102, MUSC 104, and MUSC 175; minimum NIU cumulative GPA of 2.50; and successful completion of the ICTS Basic Skills Test; or consent of school.

371. MIDDLE SCHOOL/JUNIOR HIGH MUSIC METHODS (4). Music materials, learning experiences, and teaching techniques for the general music and ensemble music program in the middle school and junior high school. Includes clinical experiences in middle school/junior high school settings. PRQ: Grade of C or better in MUSC 275; minimum NIU cumulative GPA of 2.50; and admission to teacher certification program; or consent of school.

372. SECONDARY MUSIC METHODS (4). Music materials, learning experiences, and teaching techniques for the ensemble music program in secondary schools. Also covers some study of the general music program at the high school level. Includes clinical experience in secondary settings. PRQ: Grade of C or better in MUSC 202; grade of C or better in MUSC 204 or MUSC 267; MUSC 360; MUSC 371; minimum NIU cumulative GPA of 2.50; and admission to teacher certification program. For students in the instrumental music area of study, a grade of C or better in four of the following. MUSC 170, MUSC 171, MUSC 172, MUSC 173, MUSC 174; or consent of school.

373. FUNDAMENTALS, PRINCIPLES, AND PRACTICES IN ELEMENTARY MUSIC (3). Music methods and instructional materials for the elementary grades through activities in singing, listening, creating, playing, and moving to music. Includes the understanding of music fundamentals and the acquisition of functional facility in piano and/or recorder. Not open to students in the music education emphasis.

374. ORGANIZATION OF THE INSTRUMENTAL MUSIC PROGRAM (2). Problems of instrumental music administration encountered in elementary and secondary schools. Topics include elementary and secondary school repertoire for instrumental organizations; marching band techniques including charting, arranging, music literature, and production skills; jazz techniques, including literature and methods; and band and orchestra management. PRQ: Consent of school.

375. KEYBOARD METHODS AND MATERIALS (2). Methods and materials used in teaching keyboard in the public schools with

emphasis on the method of teaching in classes. PRQ: Two years of keyboard study or consent of school.

376. SURVEY OF INSTRUMENTS AND SCORING (2). Characteristics of instruments and the elementary techniques of scoring for them in various combinations. Required of all students in the vocal and general music areas of study in the music education emphasis. PRQ: Consent of school.

377. SEMINAR IN SUZUKI PEDAGOGY (2). Philosophy, psychology, repertoire, and pedagogy of the Suzuki Method including guided observation and supervised teaching. May be repeated to a maximum of 8 semester hours. PRQ: Consent of school.

380. ORFF INSTRUMENTARIUM (2). Study of philosophies of Orff-Schulwerk. Skill development and adaptation of Orff materials for classroom use with Orff or other classroom musical instruments. May be repeated. PRQ: Grade of C or better in MUSC 275.

389. SELECTED STUDIES IN MUSIC: MUSIC EDUCATION(1 to 4). Independent or small group study. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

477. JAZZ PEDAGOGY (3). Exploration of various approaches to teaching jazz including improvisation, style, articulation, and phrasing as well as the development of curriculum designs. PRQ: Consent of school.

480. WIND INSTRUMENT LITERATURE (3). Wind instrument literature from ca. 1600 to the present, with emphasis on the 20-century American concert band. Includes literature covering all major stylistic periods that is suitable for public school and college instrumental ensembles. Analytical techniques applied to selected works. PRQ: MUSC 371 and MUSC 372, or consent of school.

481. MUSIC IN THE THERAPEUTIC PROCESS (3). Therapeutic applications of music. A study of music as an agent of change and how it affects the physical, intellectual, social, and emotional domains. PRQ: Consent of school.

482. THE MUSIC EDUCATION APPROACHES OF DALCROZE, ORFF, AND KODALY (3). Exploration of the approaches of Emile Jaques- Dalcroze, Carl Orff, and Zoltan Kodaly relating to vocal/choral, instrumental, and general music education. Evaluation of pedagogical materials and application to elementary, middle/junior high, and high school levels. PRQ: Grade of C or better in MUSC 202, grade of C or better in MUSC 275, and grade of C or better in MUSC 204 or MUSC 267; or consent of school.

483. COMPUTER TECHNOLOGY IN THE P-12 MUSIC PROGRAM (3). Integrating hardware devices and software for composition, sequencing, aural skills, and theory; the Internet for supplementary instruction; basic web page construction; designing technology-infused general music curricula; and creating spreadsheets for music program administration and assessment. PRQ: MUSC 371 or consent of school.

484. STUDENT TEACHING K-12(12). Exit student teaching experience at the elementary and secondary levels for one semester. Placements arranged through the College of Visual and Performing Arts after approval by the School of Music. PRQ: Successful completion of all courses and requirements specified for the emphasis in music education including a grade of C or better in MUSC 275, MUSC 371, and MUSC 372, and fulfillment of teacher certification requirements.

Music Faculty

Paul Bauer, D.M., Northwestern University, professor, director
Tim Blickhan, D.M.A., University of Illinois, professor, assistant director, coordinator of graduate studies
Shmuel D. Ashkenasi, Diploma, Curtis Institute of Music, professor emeritus
Gregory Barrett, D.Mus., Indiana University, assistant professor
Gregory Beyer, D.M.A., Manhattan School of Music, assistant professor
Thomas Bough, D.M.A., Arizona State University, assistant professor
Ronald Carter, M.A., University of Illinois, professor
Ricardo Castañeda, M.M., Northwestern University, applied artist
Robert Chappell, M.M., University of North Texas, Presidential Teaching Professor
Elizabeth Cifani, M.M., Northwestern University, assistant professor
Glenda Cosenza, D.M.A., Temple University, assistant professor
Arthur Davis, M.M., University of Illinois, applied artist
Stephen R. Duke, M.M., University of North Texas, Distinguished Research Professor
John Fairfield, M.M., Northwestern University, professor
Robert Fleisher, D.M.A., University of Illinois, professor
John Floeter, B.M., DePaul University, applied artist
Tom Garling, M.M., University of Miami, applied artist
William Goldenberg, D.Mus., Indiana University, Distinguished Teaching Professor
Fareed Haque, B.M., Northwestern University, associate professor
Brian Hart, Ph.D., Indiana University, associate professor
Janet Hathaway, Ph.D., New York University, assistant professor
John E. Hatmaker, Ph.D., University of Iowa, visiting assistant professor
Nancy Henninger, M.M., American Conservatory of Music, applied artist
Richard T. Holly, M.M., East Carolina University, professor
Richard Hoskins, M.M., Northwestern University, applied artist
Eric Johnson, D.M.A., University of Illinois, associate professor
Marc Johnson, M.M., Catholic University of America, professor
Harold Kafer, Ph.D., University of North Texas, professor
JeongSoo Kim, D.M.A., New England Conservatory, assistant professor
Edward Klonoski, Ph.D., Ohio State University, associate professor
William Koehler, D.M.A., University of Texas, Austin, Presidential Teaching Professor
David Maki, D.M.A., University of Michigan, visiting assistant professor
Peter Middleton, M.A., University of California, professor
Brett Mitchell, D.M.A., University of Texas, Austin, assistant professor
Ann Montzka, M.M., Northern Illinois University, applied artist
Myron B. Myers, M.M., University of Southern California, professor
John K. Novak, Ph.D., University of Texas, associate professor
James Phelps, D.M.A., University of North Texas, associate professor
Willie Pickens, B.S., University of Wisconsin, applied artist
Mark Ponzo, D.M.A., Eastman School of Music, associate professor
Diane Ragains-Slawin, M.M., Chicago Conservatory of Music, professor emeritus
Amy Rhodes, Certificate of Performance, Northwestern University, applied artitst
Marlene Rosenberg, B.M., University of Illinois, applied artist
Charles Schuchat, B.M., Northwestern University, associate professor
Robert L. Sims, Artistic Diploma, Northwestern University, associate professor
Linc Smelser, M.M., Northern Illinois University, applied artist
Mathias J. Tacke, Diploma, Northwest German Music Academy, professor
Liam Teague, M.M., Northern Illinois University, assistant professor
James Tucker, M.M., University of Wisconsin, applied artist
Rodrigo Villanueva, M.M., University of North Texas, assistant professor
Jui-Ching Wang, M.M., Northern Illinois University, research scholar
Melvin Warner, M.M., University of Southern California, professor emeritus
William Watson, B.A., Carthage College, applied artist
Ronnie Wooten, D.M.A., Michigan State University, associate professor
Richard Young, M.M., Catholic University, professor

School of Theatre and Dance (THEA, TH-D)

Admission to the B.A. program in theatre studies and the B.F.A. emphases in acting and in design and technology is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The School of Theatre and Dance offers undergraduate programs leading to the B.A. and B.F.A. degrees. Students interested in a comprehensive understanding of the components of theatre may select the B.A. in theatre studies and those interested in a specific area of theatre should consider the B.F.A. in theatre arts. The school is a member of the University/Resident Theatre Association, and its programs are accredited by the National Association of Schools of Theatre.

Requirements

Majors in the School of Theatre and Dance are required to successfully complete THEA 395 or THEA 235A or THEA 255A each semester of enrollment. Four semester hours of THEA 395 are required in the major. One semester of THEA 395 must be fulfilled through house management and public relations and one semester of credit through design, technology, and stage management for the B.F.A. acting and dance emphases. Students in the B.A. program are required to take one semester hour of THEA 395 through house management and public relations in addition to two semester hours of THEA 395 in design, technology, and stage management. Attendance at all department productions scheduled as part of the semester's season of performances is required for all majors.

A grade of C or better must be achieved in THEA 201 in order to satisfy the prerequisite for all theatre arts courses numbered 300 or higher.

Double Majors

Students are not permitted to pursue degrees concurrently in more than one degree program within the School of Theatre and Dance. With the exception of those in the dance performance emphasis, B.F.A. students are strongly discouraged from seeking a double major within a degree program outside theatre arts.

Theatre Arts Core (15)

THEA 201 - The Aesthetics of Theatre (3)
THEA 235 - Stage Technology I: Costumes and Makeup (3)
THEA 235A - Stage Technology I Laboratory (1)
THEA 255 - Stage Technology II: Scenery and Lighting (3)
THEA 255A - Stage Technology II Laboratory (1)
THEA 395 - Performance and Production (4)

Major in Theatre Studies (B.A.)

Requirements in School (60)
Theatre arts core (15)
THEA 214 - Introduction to Performance (3)
THEA 215 - Fundamentals of Storytelling (3)
THEA 216 - Acting I: Performing Skills (3)
THEA 220 - Introduction to Design (3)
THEA 300 - Script Analysis (3)
THEA 312 - Directing I (3)
THEA 316 - Acting II: Technique Development (3)
THEA 370 - History of Theatre and Drama I (3)
THEA 371 - History of Theatre and Drama II (3)
THEA 412 - Directing II (3)
THEA 466 - The Business of Theatre (2)
THEA 475 - Contemporary Theatre (3)
THEA 492 - Senior Research Project (3),
OR THEA 495 - Internship in Theatre Arts (3)
Course work from the following (7)
THEA 313 - Stage Management (3)
THEA 320 - Theatre Design II: Costumes (3)
THEA 321 - Theatre Design III: Scenery (3)
THEA 322 - Theatre Design IV: Lighting (3)
THEA 335 - Costume Technology (3)
THEA 341 - Lighting Technology (3)
THEA 355 - Scene Technology (3)
THEA 381 - Theatrical Theory and Criticism (3)
THEA 404 - Stage Combat (2)
THEA 465 - Managing the Performing Arts (3)
THEA 477 - African-American Theatre (3)
THEA 478 - Period Style for the Theatre I (3)
THEA 479 - Period Style for the Theatre II (3)
THEA 481 - Playwriting I (3)
THEA 482 - Playwriting Studio (3)
THEA 497 - Tutorial in Theatre (1 to 3)
TH-D 330 - Theatre Dance (2)

Requirements outside School (0-12)
Fulfillment of B.A. foreign language requirement (0-12)
(See "Foreign Language Requirement for the B.A. Degree")

Special Requirement.
Formal continuation as a candidate for the B.A. degree will require successful completion of the theatre studies competency examination along with a review of the student's academic and creative work. The examination and review must be completed by the end of the third semester for NIU students. In the case of transfer students, the examination and review must be completed by the end of the second semester at NIU. Students are required to maintain a minimum overall 2.00 GPA; maintain a minimum 2.50 GPA in all theatre courses; successfully pass a portfolio review of work achieved in theatre, and complete THEA 492, Senior Research Project, which is to reflect academic and artistic excellence as outlined in the B.A. in theatre studies handbook or complete THEA 495, Internship in Theatre Arts.

Total Hours for a Major in Theatre Studies (B.A.): 60-72

Major in Theatre Arts (B.F.A.)

A student pursuing a B.F.A. degree with a major in theatre arts must declare one of the following emphases.

Emphasis 1. Acting

Requirements in School (81)
Theatre arts core (15)
TH-D 205 - Dance Techniques I (2)
THEA 214 - Introduction to Performance (3)
THEA 215 - Fundamentals of Storytelling (3)
THEA 300 - Script Analysis (3)

THEA 308 - Acting Technique (4)
THEA 309 - Voice for the Stage (2)
THEA 310 - Acting Technique: Emotional Preparation (4)
THEA 311 - Movement for the Stage (4)
THEA 312 - Directing I (3)
TH-D 330 - Theatre Dance (2)
THEA 370 - History of Theatre and Drama I (3)
THEA 371 - History of Theatre and Drama II (3)
THEA 407A - Period Style for Actors: Text Analysis (3)
THEA 407B - Period Style for Actors: Physicality (2)
THEA 408 - Verse Drama (3)
THEA 409A - Advanced Vocal Technique: Voice Characterization and Dialects (2)
THEA 409C - Advanced Vocal Technique: Stage Speech (2)
THEA 410 - Acting Styles: Clarity and Character (3)
THEA 411 - Advanced Movement for the Stage (2)
THEA 466 - The Business of Theatre (3)
THEA 491 - Topics in Theatrical Performance (3)
Electives by advisement (3)
Select from the following courses (2)
THEA 490 - Summer Repertory Practicum (1-3)
THEA 495 - Internship in Theatre Arts (1-9)

Special Requirements

Passing an audition and interview is required for preliminary admission to the B.F.A. emphasis in acting. Formal acceptance to the B.F.A. emphasis in acting will be by interview, audition, and review of the student's work and must be completed before the end of the second semester of the sophomore year. One probationary semester beyond this point may be allowed under extraordinary circumstances or in the case of certain transfer candidates. Students failing to maintain a minimum 3.00 GPA in their acting courses (acting, voice, movement) will not be permitted to perform in any production sponsored by the school. Private individual reviews, followed up by written synopses of such reviews will be held at least once a year to monitor the progress of the student. The performance faculty review committee reserves the right to place on casting probation or discontinue the candidacy of any B.F.A. major in the acting emphasis who shows unsatisfactory progress as determined by the committee.

All students in the acting emphasis are required to do one season of internship or repertory with SummerNITE, the School of Theatre and Dance professional company, and to serve as an assistant stage manager or production stage manager on a school main stage production.

The school also reserves the right to require the passing of an audition and interview if there is doubt about acceptance of transfer credits (in lieu of particular courses in the area of study)

Total Hours for Emphasis 1, Acting: 81

Emphasis 2. Design and Technology

Requirements in School (82)

Theatre arts core (15)
THEA 110 - Fundamentals of Acting for the Non-Major (3)
THEA 220 - Introduction to Design (3)
THEA 249 - Technical Drawing for the Theatre (3)
THEA 300 - Script Analysis (3)
THEA 312 - Directing I (3)
THEA 320 - Theatre Design II: Costumes (3)
THEA 321 - Theatre Design III: Scenery (3)
THEA 322 - Theatre Design IV: Lighting (3)
THEA 370 - History of Theatre and Drama I (3)
THEA 371 - History of Theatre and Drama II (3)
THEA 420 - Theatre Design V (3)
THEA 452 - Drawing for the Theatre (4)
THEA 466 - The Business of Theatre (1)
THEA 478 - Period Style for the Theatre I (3)
THEA 479 - Period Style for the Theatre II (3)
One of the following (3)
THEA 335 - Costume Technology (3)
THEA 341 - Lighting Technology (3)
THEA 355 - Scene Technology (3)
Course work from the following (15)
THEA 435A - Pattern Drafting (3)
THEA 435B - Millinery and Accessories (3)
THEA 435C - Dyeing and Painting (3)
THEA 450 - Advanced Drafting (3)
THEA 451 - Electronic Visualization (3)
THEA 453 - Rendering Techniques (3)
THEA 455 - Scene Painting (3)
THEA 456 - Rigging for the Performing Arts (3)
THEA 457 - Automation and Stage Machinery (3)
THEA 458 - Structural Design for the Stage (3)
Electives in 300- and 400-level theatre courses (5)

Special Requirement

An interview is required for preliminary admission to the B.F.A. emphasis in design and technology. Portfolio reviews are required for retention in the design and technology emphasis. Reviews will be held each semester to monitor the progress of the student. Formal acceptance to the B.F.A. emphasis in design and technology must be completed before the end of the second semester of the sophomore year.

Beyond one assignment in house management, all remaining hours of the THEA 395 requirement must be fulfilled through production requirements to the student's needs as determined by the design and technology faculty.

The school also reserves the right to require a portfolio examination if there is doubt about acceptance of transfer credits (in lieu of particular courses in the major area).

Total Hours for Emphasis 2, Design and Technology: 82

Emphasis 3. Dance Performance

Course work is shared by the Department of Kinesiology and Physical Education and the School of Theatre and Dance.

Requirements in Department and School (72)

Theatre arts core (15)
KNDN 475 - History of Dance: 18th Century to Modern Times (3)
THEA 110 - Fundamentals of Acting for the Non-Major (3)
TH-D 286 - Rhythmic Analysis, Improvisation, and Composition (3)
TH-D 353X - Analysis and Pedagogy of Dance (3)
TH-D 420 - The Business of Dance (3)
TH-D 474 - Dance Philosophy and Aesthetics (3)
Course work from the following (22)
TH-D 205 - Dance Techniques I (1-2)
TH-D 207 - Dance Techniques II (1-2)
TH-D 305 - Ballet III (1-2)
TH-D 306 - Modern Dance III (1-2)
TH-D 405 - Ballet IV (1-2)
TH-D 406 - Modern Dance IV (1-2)
Course work from the following (17)
KNDN 369 - African Heritage Dance (2)
KNDN 473 - Dance as Art in Education (3)
THEA 495 - Internship in Theatre Arts (1-9)
TH-D 308 - Pointe I (1)
TH-D 320 - Male Ballet Techniques (1)
TH-D 330 - Theatre Dance (2)
TH-D 355X - Fitness and Conditioning for Dancers (2)
TH-D 361 - Jazz Technique (2)
TH-D 388 - Choreography I (2)
TH-D 408 - Pointe II (1)
TH-D 409 - Pas de Deux (2)
TH-D 464X - Workshop in Movement and Performing Awareness (3)

TH-D 467 - Dance Notation I (3)
TH-D 468 - Dance Notation II (3)
TH-D 477 - Special Studies in Dance (1-2)
TH-D 488 - Choreography II (2)
TH-D 496 - Tutorial in Dance (1-3)

Other Requirements (9)

*ARTH 282 - Introduction to the Visual Arts (3)
*KNPE 100 - Scientific Basis of Human Activity (3)
*MUSC 220 - Introduction to Music (3)

Special Requirements

Students in the B.F.A. emphasis in dance performance are required to audition each semester for performance opportunities.

A proficiency review will be conducted before the completion of 18 semester hours in the B.F.A. emphasis in dance performance for formal acceptance into the degree program.

The dance division of the School of Theatre and Dance reserves the right to place on probation or to discontinue the B.F.A. dance performance emphasis of any student who shows unsatisfactory progress as determined by the dance faculty.

Recommended

MUSC 140 - Piano: Secondary (1)

Total Hours for Emphasis 3, Dance Performance: 81

Minor in Dance Performance (22)

Declaration of this minor by theatre arts majors, with the exception of B.F.A. majors in the emphasis in dance performance, is permitted.

KNDN 474 - History of Dance: Primitive Through Renaissance (3), OR KNDN 475 - History of Dance: 18th Century to Modern Times (3)
TH-D 286 - Rhythmic Analysis, Improvisation, and Composition (3)
TH-D 477 - Special Studies in Dance (2)
THEA 395 - Performance and Production (2)
Course work from the following (8)
TH-D 205 - Dance Techniques I (1-2)
TH-D 207 - Dance Techniques II (1-2)
TH-D 305 - Ballet III (1-2)
TH-D 306 - Modern Dance III (1-2)
TH-D 405 - Ballet IV (1-2)
TH-D 406 - Modern Dance IV (1-2)
Course work from the following (4)
KNDN 164 - Tap Techniques I (2)
KNDN 165 - Tap Techniques II (2)
KNDN 214 - Folk and Square Dance (1)
KNDN 369 - African Heritage Dance (2)
TH-D 308 - Pointe I (1)
TH-D 320 - Male Ballet Techniques (1)
TH-D 330 - Theatre Dance (2)
TH-D 355X - Fitness and Conditioning for Dancers (2)
TH-D 361 - Jazz Technique (2)
TH-D 408 - Pointe II (1)
TH-D 409 - Pas de Deux (2)

Course List

Theatre Arts (THEA)

110. FUNDAMENTALS OF ACTING FOR THE NON-MAJOR (3). Introduction to basic principles, theories, and techniques of acting: concentration, observation, relaxation, and objective. Basic character study with exploration of physical and vocal dynamics. May include the preparation of scene(s). Open only to non-majors and students in the dance performance and design and technology emphases.

201. THE AESTHETICS OF THEATRE (3). Introduction to the theatrical arts for the major. Nature and parameters of theatre and dance with emphasis on the collaborative process involved in their creation. Exploration of the work of significant theatre artists, models of collaboration, styles of performance, and representative play texts. Study of the theatre arts and the artist in a social and philosophical context. PRQ: Major or minor in theatre arts.

203. INTRODUCTION TO THEATRE (3). Role of theatre as a major fine art and a communicator of ideas, human understanding, and cultural values. Contributions of playwright, actor, director, designer, technician, and audience to the theatrical production. Assessment of the principles and functions of theatre arts in its diverse performance media. Theatre attendance required. Not open to theatre arts majors or minors.

214. INTRODUCTION TO PERFORMANCE (3). Fundamentals of acting introduced through acting exercises and scene study. Introduction to the basic techniques of auditioning for a role. PRQ: Major or minor in theatre arts.

215. FUNDAMENTALS OF STORYTELLING (3). Study and performance of literature such as short stories, folk tales, fairy tales, myths, legends, poetry, and novels with emphasis on oral narrative and movement to interpret the works and communicate that interpretation to an audience. PRQ: THEA 214.

216. ACTING I: PERFORMING SKILLS (3). Development of fundamentals introduced in THEA 214 with an intensive approach to acting exercises, improvisations, and scene study. PRQ: THEA 214.

220. INTRODUCTION TO DESIGN (3). Fundamentals of design for the theatre including costume, lighting, and scenery. Review of the designer's role in the production plan, design requirements, and aesthetics. Emphasis on the basic principles of two-dimensional art and graphic forms through various media and a study of color and color theory. PRQ: THEA 214 or consent of school.

235. STAGE TECHNOLOGY I: COSTUMES AND MAKEUP (3). Fundamentals of basic costume construction with emphasis on techniques, planning, and process. Theories and principles of makeup as related to dramatic production with practical laboratory experience. CRQ: THEA 235A.

235A. STAGE TECHNOLOGY I LABORATORY (1). Laboratory requirements include weekly 4-hour supervised experience in production costume construction and additional assignments on costume construction and a production running crew. CRQ: THEA 235.

249. TECHNICAL DRAWING FOR THE THEATRE (3). Techniques in the preparation of design and technical drawings for theatrical production including ground plans, elevations, detail drawings, working drawings, and light plots. Concentration on drawing experiences following the conventions and practices of theatrical graphic standards. PRQ: Consent of school.

255. STAGE TECHNOLOGY II: SCENERY AND LIGHTING (3). Fundamentals of scenery and lighting technology with emphasis on theatre tools and equipment. Training in basic principles and skills of stage carpentry, lighting, and rigging. CRQ: THEA 255A.

255A. STAGE TECHNOLOGY II LABORATORY (1). Laboratory requirements include supervised experience in set construction, lighting, and rigging with assignments on school productions. CRQ: THEA 255.

300. SCRIPT ANALYSIS (3). Study of how plays are structured. Development of an analytical approach to drama in production. Careful examination of representative plays drawn from the canon of dramatic literature. PRQ: THEA 201.

308. ACTING TECHNIQUE (4). Improvisation and scene work emphasizing development of the actor's behavioral resources and spontaneity. Preliminary work on textual analysis, relaxation, and reduction of self-awareness. Introduction to and exploration of productive rehearsal techniques. PRQ: THEA 214 and THEA 215, or consent of school. CRQ: THEA 309 and THEA 311.

309. VOICE FOR THE STAGE (2). Development of vocal techniques for the actor. Emphasis on the fundamentals of good stage speech, including a study of the International Phonetic Alphabet, textual

* Available for general education credit.

analysis, and vocal expression and projection. May be repeated to a maximum of 6 semester hours. PRQ: THEA 214 and THEA 215, or consent of school. CRQ: THEA 308 and THEA 311.

310. ACTING TECHNIQUE: EMOTIONAL PREPARATION (4). Refinement of the actor's inner resources, and further development of the actor's technique and skills at textual analysis. Exploration of relationship, point of view, circumstance, truthful involvement, and the reality of doing. PRQ: THEA 308. CRQ: THEA 309 and THEA 311.

311. MOVEMENT FOR THE STAGE (2). Development of movement techniques for the actor. Concentration on relaxation as a method of self-awareness. Further development of stage combat techniques. May be repeated to a maximum of 6 semester hours. PRQ: THEA 214 and THEA 215, or consent of school. CRQ: THEA 309 and THEA 308 or THEA 310.

312. DIRECTING I (3). Principles of blocking, timing, control of focus, and other elements of directing. Planning the interpretive concept of a production and reporting such plans in prompt-book form. Problems of training and directing amateur actors. Procedures of supervising the production from casting to performance. Laboratory experience in directing scenes and one-act plays. PRQ: THEA 214 or THEA 308, or consent of school.

313. STAGE MANAGEMENT (3). Examination of the role of the stage manager in theatrical production. Practice in the techniques of preparing a prompt script and other supportive material. PRQ: THEA 312.

316. ACTING II: TECHNIQUE DEVELOPMENT (3). Continuation of the study of performance; increasing the student's awareness of and mastering of space, shape, tempo, architecture, topography, emotion, theme, and narrative. Exercises and practice in script analysis applied to various texts. Study of the commonly held central elements of realistic acting: objective, obstacle, motivation, and action playing. Further study of the relationship between sound, language, and movement. Students generate and perform original material as well as prepare and perform scenes of different genres. PRQ: THEA 216.

320. THEATRE DESIGN II: COSTUMES (3). Discussions and projects investigating aesthetic, technical, and practical problems of designing costumes for the stage. PRQ: THEA 220 or consent of school.

321. THEATRE DESIGN III: SCENERY (3). Discussions and projects investigating aesthetic, technical, and practical problems of designing scenery for the stage. PRQ: THEA 220 and THEA 249, or consent of school.

322. THEATRE DESIGN IV: LIGHTING (3). Discussions and projects investigating aesthetic, technical, and practical problems of designing lighting for the stage. PRQ: THEA 220 and THEA 249, or consent of school.

335. COSTUME TECHNOLOGY (3). The procedure of planning costumes for dramatic production with emphasis on pattern development, accessories, and alternative approaches to creative construction. Weekly 3-hour supervised and/or independent laboratory experience in costume technology. PRQ: THEA 235 or consent of school.

341. LIGHTING TECHNOLOGY (3). Development and application of advanced technical skills. Emphasis on planning and rigging of lights for a variety of theatrical spaces and touring productions. Laboratory requirements include supervised practicum projects and rigging experience. Weekly 3-hour supervised and/or independent laboratory experience in lighting technology. PRQ: THEA 255 or consent of school.

355. SCENE TECHNOLOGY (3). Principles and processes involved in scene technology. Advanced study of the planning, construction, mounting, and shifting of scenery and properties including tools, materials, and techniques. Weekly 3-hour supervised and/or independent laboratory experience in scene technology. PRQ: THEA 249 and THEA 255, or consent of school.

370. HISTORY OF THEATRE AND DRAMA I (3). Study of the development of theatre as an artistic form from classical Greece and Rome through the Elizabethan period. Reading and analysis of significant play texts in the context of their original performance. PRQ: THEA 300 or consent of school.

371. HISTORY OF THEATRE AND DRAMA II (3). Study of the theory and practice of theatre art during the European renaissance. Reading and analysis of significant play scripts in the context of their original performance from the Restoration through contemporary times. PRQ: THEA 370 or consent of school.

381. THEATRICAL THEORY AND CRITICISM (3). Readings in contemporary and classical criticism of theatrical performance. Writing of critical papers and reviews of plays, films and other theatrical performances.

395. PERFORMANCE AND PRODUCTION (1). Practicum experience in production areas of theatre: acting, directing, dance, dramaturgy, design, technology, and theatre management. May be repeated to a maximum of 15 semester hours. S/U grading may be used. PRQ: School of Theatre and Dance major or minor.

396. PERFORMING ARTS PRACTICUM (1). Directed specific performance laboratories in acting, directing, and interpretation as well as plenary session seminars in material preparation and techniques in performing arts. Individual supervision, guidance, critiques, and clinical evaluations by the faculty. May be repeated to a maximum of 4 semester hours.

404. STAGE COMBAT (2). Introduction to the fundamental skills of effective stage violence. Exploration of hand-to-hand, rapier, and dagger usage on stage. Teaches a fundamental understanding of violence on stage which provides a basis for advanced application to the technique.

407. PERIOD STYLE FOR ACTORS(2 to 3).
A. Text Analysis (3)
B. Physicality (2)
Covers a variety of historical eras. PRQ: Admission to acting emphasis or consent of school.

408. VERSE DRAMA (3). Integrated voice and performance work on scenes and monologues from Greek to Elizabethan drama. PRQ: Admission to acting emphasis or consent of school.

409. ADVANCED VOCAL TECHNIQUE (2).
A. Voice Characterization and Dialects
B. Musical Theatre Performance
C. Stage Speech
Advanced voice work for the actor. Detailed work in voice characterization and dialects, musical theatre performance, and stage speech. Supports technique work in THEA 410. Two semester hours each of A, B, and C required in the acting emphasis. PRQ: Admission to acting emphasis or consent of school.

410. ACTING STYLES: CLARITY AND CHARACTER (3). Subject matter from a variety of performance techniques, including those of Sanford Meisner, Jerzy Grotowski, Joseph Chaiken, and many others. Emphasis on character interpretation, exploration of speech and movement, and scene analysis. PRQ: Admission to acting emphasis or consent of school.

411. ADVANCED MOVEMENT FOR THE STAGE (2). Focus on advanced postural analysis and mastery of physical character acting. May be repeated to a maximum of 6 semester hours. PRQ: Admission to the acting emphasis or consent of school. CRQ: THEA 409 and THEA 407 or THEA 410.

412. DIRECTING II (3). Advanced theory of stage direction with emphasis on problems in classical styles, experimental and special contemporary modes. A heavily research-oriented course with additional practice in directing projects. PRQ: THEA 312 or consent of school.

416. ACTING STUDIO: ON-CAMERA (3). Artistic projects requiring acting for film and/or video.

419. PERFORMANCE (1 to 3). In-depth research and performance preparation in one significant area of the performing arts. Open to students who are prepared for advanced and specialized study. Topics to be announced in advance. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

420. THEATRE DESIGN V (3). Investigation of design applications to the various theatrical forms including dance, opera, ballet, and musical theatre. Work in the collaborative process with costume, lighting, scenic design, and technical students in arriving at conceptual treatment and visualization. Emphasis on problem solving and independent growth in rendering and presentational work. PRQ: THEA 320, THEA 321, THEA 322, or consent of school.

421. THEATRE DESIGN VI (3). Continuation of THEA 420 culminating in a final project of major breadth and scope covering all three areas of theatre design. PRQ: THEA 420.

435. ADVANCED COSTUME TECHNOLOGY (3).
A. Pattern Drafting
B. Millinery and Accessories
C. Dyeing and Painting
Subject varies from semester to semester. May be repeated to a maximum of 9 semester hours. PRQ: THEA 335 or consent of school.

449. DESIGN AND TECHNOLOGY (1 to 3). Seminar in special problems and topics in design and technology. Open to students who are prepared for advanced and specialized study. Topics to be announced in advance. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

450. ADVANCED DRAFTING (3). Advanced study of drafting techniques for the theatre emphasizing designing with Autocad with focus on the creation of virtual models and the derivation of typical design documentation from Autocad models. May be repeated to a maximum of 6 semester hours. PRQ: THEA 249 or consent of school.

451. ELECTRONIC VISUALIZATION (3). Advanced study of modeling, rendering, and animation technique for the theatre emphasizing design with Autocad and Autovision or 3-D Studio. May be repeated to a maximum of 6 semester hours. PRQ: THEA 450 or consent of school.

452. DRAWING FOR THE THEATRE (2). Development of drawing and painting skills and exploration of graphic media paying particular attention to the needs of theatrical designers. May be repeated to a maximum of 6 semester hours.

453. RENDERING TECHNIQUES (3). Practical exploration of graphic media and techniques for the theatrical designer. May be repeated to a maximum of 6 semester hours. PRQ: THEA 220 or consent of school.

455. SCENE PAINTING (3). Hands-on investigation of concepts, tools, and techniques of scenic painting. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

456. RIGGING FOR THE PERFORMING ARTS (3). Advanced study of overhead lifting equipment and techniques commonly used in theatres, arenas, and other performance venues. PRQ: THEA 249 and THEA 355, or consent of school.

457. AUTOMATION AND STAGE MACHINERY (3). Advanced study of mechanical devices used to create motion in theatrical productions. PRQ: THEA 249 and THEA 355, or consent of school.

458. STRUCTURAL DESIGN FOR THE STAGE (3). Advanced study of strengths and weaknesses of material and joining methods used to construct scenery. PRQ: THEA 249 and THEA 355, or consent of school.

465. MANAGING THE PERFORMING ARTS (3). Managing and working within performing arts organizations with special attention to areas of marketing, public relations, grants acquisition, audience development, box office procedures, budgeting, union relations, organizational structure, and board recruitment and participation. Study of the role of government in the funding of arts groups.

466. THE BUSINESS OF THEATRE (1 to 3). Study and practice of audition and interviewing techniques, contracts, taxes, unions, agencies, and other subjects for the professional.

475. CONTEMPORARY THEATRE (3). Study of theatrical art throughout the world since 1968, and the changing role of theatre in society. Considerations of contemporary movements in acting, directing, design, and playwriting. Reading and analysis of significant and contemporary plays. PRQ: THEA 370, THEA 371, or consent of school.

476. THEATRE HISTORY (1 to 3). Seminar in special periods of theatre history. Open to students who are prepared for advanced and specialized study. Topics to be announced in advance. May be repeated to a maximum of 6 semester hours.

477. AFRICAN-AMERICAN THEATRE (3). Exploration of the history of African-American theatre artists in the United States. Survey of the contribution to theatre history by African-Americans from the minstrel era to the present. Emphasis on the development and evolution of playwrights, actors, and audiences emphasized. PRQ: Consent of school.

478. PERIOD STYLE FOR THE THEATRE I (3). Intensive investigation of period style from pre-Egyptian through the Renaissance as it relates to theatrical production. Exploration of period clothing, manners, decor, and architecture with projects from dramatic literature.

479. PERIOD STYLE FOR THE THEATRE II (3). Intensive investigation of period style from the Baroque through contemporary as it relates to theatrical production. Exploration of period clothing, manners, decor, and architecture.

480. STUDIES IN AMERICAN THEATRE HISTORY (3). A historical-critical study of theatre in the United States from its inception to the present day. Emphasis on the application of historical and critical method to the theatre; exploration of theatre in this country as a developing art form and as a manifestation of popular culture.

481. PLAYWRITING I (3). Conventions and techniques that playwrights use to communicate in the theatre. Analysis of selected plays. Lectures and discussion combined with exercises in the planning and writing of scenes and short plays. PRQ: THEA 300 or consent of school.

482. PLAYWRITING STUDIO (3). Advanced work on new scripts generated by student playwrights. Involves interaction and collaboration in a three-dimensional setting with directors and performers. PRQ: THEA 481 or consent of school.

490. SUMMER REPERTORY PRACTICUM (3). Extensive and concentrated production experience in the preparation and performance of summer theatre repertory. Emphasis on the unique problems of repertory companies: performance, technology, and management. May be repeated to a maximum of 9 semester hours. PRQ: Consent of school.

491. TOPICS IN THEATRICAL PERFORMANCE (3). Intensive investigation of a single dramatic form or theatrical phenomenon with emphasis on performance. Topics announced. May be repeated to a maximum of 6 semester hours as topic varies. PRQ: Consent of school.

492. SENIOR RESEARCH PROJECT (3). Presentation of a senior research project or a performance project to the Comprehensive Theatre Studies Review Board. Collaboration within the College of Visual and Performing Arts encouraged. PRQ: Senior standing in the B.A. program.

495. INTERNSHIP IN THEATRE ARTS (1 to 9). Off-campus experience opportunities with selected organizations in theatre or related areas. Limited to qualified students. May be repeated to a maximum of 9 semester hours. S/U grading may be used. PRQ: Consent of school.

497. TUTORIAL IN THEATRE (1 to 3). Directed study and research in special areas of theatre arts. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

498H. HONORS TUTORIAL IN THEATRE (1 to 3). Directed study and research in special areas of theatre arts. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

Dance Performance (TH-D)

205. DANCE TECHNIQUES I (1 to 2). Basic performance techniques in contemporary dance including fundamentals of ballet and modern dance. May be repeated to a maximum of 4 semester hours.

207. DANCE TECHNIQUES II (1 to 2). Techniques for performance in contemporary dance including ballet and modern. Proficiency requirement. May be repeated to a maximum of 6 semester hours.

222. DANCE AND THE FINE ARTS (3). Aesthetic considerations of dance as a fine art. The study of the theory and philosophy of dance as related to music, theatre and the visual arts. Not open to theatre arts majors or minors.

286. RHYTHMIC ANALYSIS,IMPROVISATION,AND COMPOSITION (3). Introduction to the principles of dance composition and the process of constructing simple compositional forms. Improvisation involves originating and performing dance movement without pre-planning and is the primary tool in dance composition. Basic rhythmic skills, lessons in counting and count subdivision, and basic rhythmic dance forms.

287. COMPOSITION I (2). Introduction to principles of dance composition and the process of constructing simple compositional forms. Includes movement exploration through improvisation. PRQ: TH-D 286.

305. BALLET III (1 to 2). Study of the performance techniques in ballet at the intermediate level. May be repeated. Proficiency requirement.

306. MODERN DANCE III (1 to 2). Study of the performance techniques in modern dance at the intermediate level. May be repeated. Proficiency requirement.

308. POINTE I (1). Elementary pointe techniques. May be repeated to a maximum of 4 semester hours. CRQ: TH-D 305 or TH-D 405.

320. MALE BALLET TECHNIQUES (1). Specialized exercises and extended ballet vocabulary. May be repeated. CRQ: TH-D 305 or TH-D 405.

330. THEATRE DANCE (2).
A. Ballroom
B. Pre-classic
C. Musical Comedy I
D. Musical Comedy II
Analysis of theatrical dance forms and period styles of movement. Practice in the execution of the particular dance forms studied. Subject and materials change from term to term. May be repeated to a maximum of 8 semester hours.

353X. ANALYSIS AND PEDAGOGY OF DANCE (3). *Crosslisted as KNDN 353*. Application of pedagogical knowledge and skills for teaching dance in a school and/or community setting. Analysis of movement utilizing principles of movement and applied kinesiology.

355X. FITNESS AND CONDITIONING FOR DANCERS (2). *Crosslisted as KNDN 355.* Analysis and techniques that promote fitness and conditioning for dancers. Emphasis on dance classes that apply to physiological, kinesiological, and movement principles, prevention of injuries, weight control, and nutrition.

361. JAZZ TECHNIQUE (2). Development of the techniques of jazz dance. A stimulating, rhythmic and spatial experience with creative combinations that move, communicate, and challenge. May be repeated to a maximum of 4 semester hours.

388. CHOREOGRAPHY I (2). Analysis of the elements of choreographic form, styles, and trends with experience in the development of dance studies; theory and technique of solo and small group work. PRQ: TH-D 286 or consent of school.

405. BALLET IV (1 to 2). Concentration on complex ballet techniques for performance. May be repeated. Proficiency requirement.

406. MODERN DANCE IV (1 to 2). Concentration on complex modern dance techniques for performance. Emphasis on movement quality and interpretative performance elements. May be repeated. Proficiency requirement.

408. POINTE II (1). Advanced pointe techniques. May be repeated. Proficiency requirement. CRQ: TH-D 405.

409. PAS DE DEUX (2). Partnering techniques and principles in classical ballet. May be repeated. CRQ: TH-D 305 or TH-D 405.

420. THE BUSINESS OF DANCE (3). Practical application of studies to business, artistic, and academic development in the profession. PRQ: At least junior standing.

464X. WORKSHOP IN MOVEMENT AND PERFORMING AWARENESS (3). *Crosslisted as MUSC 464.* Lectures, demonstrations, and related activities regarding the work of Moshe Feldenkrais as it applies to the training of performing artists. S/U grading. PRQ: Junior standing and consent of School of Music.

467. DANCE NOTATION I (3). A theoretical and practical introduction to notation. Analysis and recording of movement through the systems of Labanotation or Benesh Movement Notation. Equal emphasis on the reading and writing of dance scores. Recommended: Knowledge of intermediate-level ballet vocabulary.

468. DANCE NOTATION II (3). Continuation of Dance Notation I, including floor work and group scoring. Emphasis on reading of dance scores and recording movement in Labanotation or Benesh Movement Notation. PRQ: TH-D 467.

474. DANCE PHILOSOPHY AND AESTHETICS (3). Philosophy of dance including aesthetic principles and critical evaluations of varying dance forms and styles.

477. SPECIAL STUDIES IN DANCE (1 to 2).
A. Spanish
B. Mid-Eastern
C. Advanced Theatrical Jazz
D. Character
E. Female Classical Variations
J. Male Classical Variations
M. Theatrical Tap
N. Repertory
Q. Others
Studies in dance forms. Open to students who qualify for specialized study. May be repeated to a maximum of 10 semester hours.

488. CHOREOGRAPHY II (2). Continued analysis of the elements of choreographic forms, styles, and trends with the development of dance studies of extended length; consideration of the theory and technique of advanced group work. May be repeated to a maximum of 4 semester hours. PRQ: TH-D 388.

496. TUTORIAL IN DANCE (1 to 3). Directed individual study in special areas of dance. May be repeated to a maximum of 12 semester hours.

Theatre and Dance Faculty

Alexander Gelman, M.F.A., Boston University, professor, director
Judith Q. Chitwood, M.A., University of Cincinnati, associate professor
Paula Frasz, M.F.A., University of Illinois, professor
Kent G. Gallagher, Ph.D., Indiana University, professor
Kathryn Gately-Poole, M.F.A., Mason Gross School of the Arts, professor
Alexander Gelman, M.F.A., Boston University, professor
Benny Gomes, M.F.A., University of Illinois, assistant professor
Lori Hartenhoff, M.F.A., University of Wisconsin, associate professor
Christopher Markle, M.F.A., Yale University, assistant professor
Terrence McClellan, M.F.A., University of Massachusetts, professor
Randall Newsom, M.A.Ed., Eastern Kentucky University, professor
Tracy Nunnally, M.F.A., Florida State University, assistant professor
Melanie Parks-Baumgartner, M.F.A., University of Illinois, associate professor
Richard Poole, M.F.A., Rutgers University, assistant professor
Patricia L. Ridge, Ph.D., University of Colorado, Boulder, professor
Deborah Robertson, M.F.A., Smith College, associate professor
Sahin Sahinoglu, M.F.A., Northern Illinois University, assistant professor
Robert Schneider, D.F.A., Yale University, assistant professor
Phillip Timberlake, M.F.A., Virginia Commonwealth University, assistant professor
Karen Williamson, M.F.A., George Mason University, assistant professor

School of Inter-College Interdisciplinary Certificate

Certificates of Undergraduate Study

Applied Ethics (12)

Coordinators: William Tolhurst, Department of Philosophy; David Wade, Department of Management

This certificate offers a coherent set of courses designed to enhance students' knowledge of ethical theories and principles and develop an expertise in applying ethical knowledge in their professional and personal lives. The required course examines the principal ethical theories in Western thought. The electives examine ethical concerns specific to a variety of disciplines–business, engineering, health sciences, humanities, and social sciences.

The certificate of undergraduate study in applied ethics is open to all students admitted to NIU. Students must maintain good academic standing within the university, achieve a minimum grade of C in each course applied toward the certificate, and complete all certificate work within a period of six calendar years. All course requirements for the certificate must be completed at NIU. Some courses may have prerequisites that are not part of the certificate curriculum. Students are strongly encouraged to take PHIL 331, Classical Ethical Theories, early in the certificate curriculum. Students pursuing the certificate should meet with the coordinator for the certificate of undergraduate study in applied ethics early in their career.

PHIL 331 - Classical Ethical Theories (3)
Three of the following (9)
- AHPH 480 - Ethical Decision Making for Health Professionals (3)
- COMS 403 - Freedom of Speech and Communication Ethics (3)
- COMS 455 - Media Law and Ethics (3)
- JOUR 480 - Journalism Law and Regulation (3)
- MGMT 301 - Business and Society (3)
- PHIL 335 - Environmental Ethics (3)
- PHIL 336 - Biomedical Ethics (3)
- PHIL 337 - Business Ethics (3)
- PHIL 362 - Philosophy of Law (3)
- POLS 322 - Politics and the Life Sciences (3)
- POLS 323 - Biomedicine and the Law (3)
- POLS 456 - War, Empire, and Ethics (3)
- TECH 401 - Ethics in Technology (3)

Homeland Security (18)

Coordinator: Dennis Cesarotti, Department of Technology

This certificate offers a set of courses designed to enhance students' knowledge of several aspects of homeland security including origins of terrorism, disaster preparation, disaster response, recovery, and follow-up. Certificate completers will be able to develop and implement systems for homeland security planning and management at the local, state, and federal levels. They will be able to identify hazards due to human-made and natural disasters, advise public and private organizations of best-practice risk management preparation, response, and recovery strategies, and use appropriate technologies. They will have an understanding of the conditions that may lead to terrorist activity as well as how to prepare for and deal with human-made and natural disasters.

The certificate of undergraduate study in homeland security is open to all students admitted to NIU. Students must maintain good academic standing, achieve a minimum grade of C in each course applied toward the certificate, and complete all certificate work within a period of six calendar years. All course requirements for the certificate must be completed at NIU. Some courses may have prerequisites that are not part of the certificate curriculum. Students are strongly encouraged to complete the core courses early in the certificate curriculum. Students pursuing the certificate of undergraduate studies in homeland security should meet with the certificate coordinator early in their career.

Core Courses (6)
TECH 432 - Disaster Preparedness (3)
POLS 386 - Global Terrorism (3)

Manufacturing and Industrial Technology Track, four of the following (12)
- ISYE 475 - Decision Analysis for Engineering (3)
- TECH 231 - Safety Programs (3)
- TECH 433 - Toxicology for Industry (3)
- TECH 482 - Industrial Safety Engineering Analysis (3)
- TECH 485 - Industrial Risk Management (3)

Inter-College and University-Wide Interdisciplinary Courses (IDSP, UNIV)

See college sections for interdisciplinary courses offered by individual colleges.

General

IDSP 290. DRAMA INTO FILM (3). Consideration of selected classics of drama which have been filmed from the literary, theatrical, and cinematic approaches. Team-taught by members of the English, communication, and theatre and dance faculty through lectures, discussion, and film showings.

IDSP 291. ART AND LITERATURE IN THE ANCIENT WORLD (3). The interrelationships between the study of art history and literature as the two disciplines, through their complementary methods of approach, introduce and clarify the cultural backgrounds of the Egyptian, Mesopotamian, Hebrew, and Greco-Roman civilizations.

UNIV 101. UNIVERSITY EXPERIENCE (1). Introduction to Northern Illinois University and the baccalaureate experience. Exploration of factors influencing the transition into the university. Development of skills to enhance academic success with a focus on student responsibility for learning. Available only to first-year students. May not be repeated.

UNIV 201. THE TRANSFER EXPERIENCE (1). Introduction to NIU and the baccalaureate experience with emphasis on those experiences and challenges unique to transfer students. Exploration of factors influencing the transition into the university. Development of skills and practices to enhance academic success and satisfaction with the college experience. Available only to transfer students in their first semester at NIU. May not be repeated. PRQ: New transfer student with 12 or more semester hours at time of transfer or consent of Orientation Office.

Black Studies

IDSP 200. RACISM IN AMERICAN CULTURE AND SOCIETY (3). Examination of the forces that consciously and unconsciously engendered racism in American society and the effect of racism not only on the victims but also on those perpetuating it. The social cost of racism and possible solutions.

IDSP 202. ISSUES FACING AFRICAN-AMERICAN STUDENTS (3). Definition, conceptualization, analysis, and discussion of issues related to the survival of students of color on a predominantly white campus.

IDSP 211. EDUCATING FOR CULTURAL SENSITIVITY (3). Analytical look at student's own ethnic and cultural background, and the ethnic and cultural background of others. Emphasis on surveying materials related to life experiences of ethnics in the United States. Systematic look at the education system and how it has responded to the needs of various ethnic groups.

IDSP 219. INTRODUCTION TO AFRICAN STUDIES (3). Introduction to the African continent: its art and cultures, social and educational structures, history, economic development, political dynamics, and current crises.

IDSP 300. FOUNDATIONS OF BLACK STUDIES (3). Introduction to the development, philosophy, and history of black studies.

IDSP 302. TOPICS IN BLACK STUDIES (3). The intellectual, methodological, and paradigmatic traditions in black studies related to a specific topic with a broad interdisciplinary perspective or scholarly and artistic research, practice, and theory pertaining to people of African descent. May be repeated to a maximum of 9 semester hours when topic varies.

IDSP 316. AFRICAN–AMERICAN CRITICAL THOUGHT (3). Surveys and analysis of the socio-historical thought of the African-American community of the 19th and 20th centuries. PRQ: IDSP 200 or IDSP 219.

IDSP 402. THE AFRICANA WOMAN (3). Examination of and practical look at the history, contributions, and role of the African American woman.

IDSP 445. INDEPENDENT STUDY IN BLACK STUDIES (1 to 3). Independent research under faculty supervision on a topic approved by the director of the Center for Black Studies and the faculty member who will direct the research. May be repeated to a maximum of 6 semester hours.

IDSP 493. AFRICAN-CENTERED RESEARCH METHODS (3). Capstone course for the minor in black studies. Focus on developing tools for research on Africana populations. PRQ: IDSP 219, IDSP 300, and consent of director.

Environmental Mangement Systems

IDSP 441. ENVIRONMENTAL MANAGEMENT SYSTEMS (3). How to plan and implement environmental management systems in a variety of settings to prevent environmental pollution and other environmental problems. Interdisciplinary perspectives used to discuss environmental management systems for companies, communities, and governmental agencies, with emphasis on student group projects, case studies, and Internet applications. Instruction by faculty from the Colleges of Business, Engineering and Engineering Technology, and Liberal Arts and Sciences, along with guest speakers.

IDSP 442. PROSEMINAR/INTERNSHIP IN ENVIRONMENTAL MANAGEMENT SYSTEMS (3). Application of concepts of environmental management systems to real-world settings through an internship or other applied learning experience. Internship partners may be a company, community, or governmental agency; or students may elect to pursue a project with a faculty adviser. Includes group meetings to discuss students' on-going projects and to relate these to core readings. Written case study of internship or project required. PRQ: IDSP 441.

Environmental Studies

IDSP 450. ISSUES IN ENVIRONMENTAL STUDIES(2). Interdisciplinary approaches and perspectives on selected issues in environmental studies. Independent study and seminars. PRQ: Completion of 15 semester hours applicable to the environmental studies minor and consent of Department of Geography.

Gerontology

IDSP 465. ISSUES IN GERONTOLOGY (3). Interdisciplinary examination of aging and the older adult population. Includes physiological, psychosocial, health, and health promotion aspects of aging. PRQ: Senior standing or consent of gerontology program director.

Medieval Studies

IDSP 225. INTRODUCTION TO MEDIEVAL SOCIETY AND CULTURE (3). Interdisciplinary orientation and introduction to medieval studies including study of different cultural forms (literature, music, art, philosophy, science, and religion) and the "way of life" of different strata of society.

IDSP 425. SEMINAR IN MEDIEVAL STUDIES (3). Interdisciplinary seminar for undergraduates which is required for the medieval studies concentration and open to other qualified students with the permission of the instructor. The course will focus on a selected theme or period in medieval civilization. PRQ: Consent of coordinator.

Study Abroad

IDSP 301. STUDY ABROAD PROGRAMS (1 to 9). Course work undertaken as part of an approved university study abroad program. May be counted toward the satisfaction of general education requirements if approved as the equivalent of an authorized general education course. May be repeated to a maximum of 9 semester hours.

IDSP 401. STUDY ABROAD PROGRAMS (1 to 9). Course work undertaken as part of an approved university study abroad program. May be counted toward the satisfaction of general education requirements if approved as the equivalent of an authorized general education course. May be repeated to a maximum of 9 semester hours.

Other Academic Units

Center for Black Studies

Director: LaVerne Gyant, Ed.D.

The Center for Black Studies is an academic and research center that offers interdisciplinary undergraduate courses relating to the African-American and African experience. The center also collects and analyzes data on all aspects of minority experiences. In addition the center seeks to stimulate students' professional and career interests. Toward this end it encourages a number of minority student professional organizations.

Students should contact the director of the Center for Black Studies for current course offerings and information about student organizations and cultural events sponsored by the center.

Minor in Black Studies (18)

The black studies minor presents a body of knowledge that examines the experiences of black people in the United States. It also explores the African heritage of black people and the continuity of that heritage through the years in the New World. Among other requirements students must analyze racism and its present-day manifestations in all spheres of life in order to promote better understanding among ethnic and racial groups. Several university departments participate in the minor in black studies including anthropology, economics, English, finance, geography, history, political science, and sociology.

Requirements (18)

Three of the following (9)
- HIST 270 - The African-American to 1865 (3)
- HIST 348 - African History to 1600 (3)
- *IDSP 200 - Racism in American Culture and Society (3)
- *IDSP 219 - Introduction to African Studies (3)
- IDSP 300 - Foundations of Black Studies (3)

One of the following options (6-9)[1]

African Option (6-9)

Two or three of the following (6-9)
- ANTH 403 - Peoples and Cultures of Africa South of the Sahara (3)
- ECON 341C - Economic Area Studies: Africa, South of the Sahara (3)
- FLTR 271 - Literature in Translation (3)
- GEOG 336 - Geography of Africa (3)
- HIST 349 - African History Since 1600 (3)
- POLS 368 - Governmental Systems in Africa (3)

African American Option (6-9)

Two or three of the following (6-9)
- ECON 302 - Minority Economic Problems (3)
- HIST 271 - The African-American Since 1865 (3)
- IDSP 202 - Issues Facing African-American Students (3)
- *IDSP 211 - Educating for Cultural Sensitivity (3)
- IDSP 302 - Topics in Black Studies (3)
- IDSP 402 - The Africana Woman (3)
- IDSP 445 - Independent Study in Black Studies (3)
- JOUR 490 - Ethnic Minorities and the News Media (3)
- POLS 309 - Political Behavior of Racial Minorities in the United States (3)
- SOCI 361 - Race and Ethnic Relations (3)
- SOCI 454 - Racial and Ethnic Minority Families (3)

Electives (0-3)

HIST 472 - Topics in African-American History (3)
POLS 295 - Critical Issues in American Politics (3)
POLS 326 - Government and Welfare (3)
SOCI 461 - Intergroup Relations (3)
Another approved elective with consent of the Center for Black Studies

Center for Burma Studies

Director: Catherine Raymond, Ph.D.

The Center for Burma Studies was established in 1986 as a repository for multivarious materials on Burma (Myanmar). Included in the collection are an extensive library, the Burma art collection, and the bequest of the late Paul Bennett, a large and most selective private collection of Birmanica that includes rare translations, manuscripts, and objects of art.

All accessioned articles and books are available for scholarly research, subject to the usual conditions.

The center works in coordination with the Center for Southeast Asian Studies in assisting those students who wish to include Burma studies as part of the minor in Southeast Asian studies. There are 27 courses taught at NIU with significant content on Burma.

Center for Latino and Latin American Studies

Director: Michael Gonzales, Ph.D.

The Center for Latino and Latin American Studies is an academic, research, and public service center designed to integrate and coordinate Latino and Latin American studies. The center sponsors pertinent research and publication, serves as a repository of information and a source of communication about Latino and Latin American concerns, coordinates instruction in both areas, and provides academic advisement for students undertaking minors in these fields. In addition, the center cooperates with other NIU units in those programmatic activities of specific concern to Latinos.

See also "Minor in Latino/Latin American Studies."

Center for Southeast Asian Studies

Director: Dwight King, Ph.D.

The Center for Southeast Asian Studies, established in 1963, provides leadership, focus, and coordination for Southeast Asian Studies at NIU. It is responsible for addressing student needs,

* Available for general education credit.
[1] Students taking only 6 semester hours in an option must choose 3 semester hours from the list of electives.

coordinating undergraduate and graduate courses dealing with Southeast Asia, and developing and administering other programs concerned with this region of the world. Formal and informal exchange relationships exist with universities and programs in Burma, Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam which offer qualified students opportunities and facilities for graduate research and undergraduate training in these countries. The center is an active and leading member of SEASSI (Southeast Asian Studies Summer Institute), a national consortium of Southeast Asian studies centers, and is involved with the Center for Burma Studies at NIU.

See also “Minor in Southeast Asian Studies.”

Regional History Center

Director: Glen A. Gildemeister, Ph.D.

The Regional History Center has as its basic goal to acquire, preserve, and make available to the public the most significant historical records of the northern Illinois region. The center actively collects historical material from the 18 northernmost counties of Illinois, excluding Cook County. Since 1964 the center has evolved from a small university archival unit to a multifaceted research center containing three related sets of historical records available to researchers; Regional Collections, University Archives, and Local Government Records.

Holdings in the Regional Collections include original manuscripts and records generated by private individuals, institutions, and organizations from throughout the area, with emphasis on several major themes in the region’s history: agriculture, politics, ethnic heritage, commerce and industry, the role of women, and urban expansion. University records that have permanent historical or administrative value are housed in the University Archives. These materials include governing board proceedings, records of university administrative offices, faculty papers, records of student government and organizations, a range of publications, and extensive photographs of campus life. The Local Government Records collection, as part of the Illinois Archives Depository system administered by the Illinois State Archives, has the responsibility of preserving local public records and making them available to researchers.

International Programs

Executive Director: Deborah Pierce, Ph.D.

The Division of International Programs supervises and coordinates the international activities of the university in order to encourage greater internationalization of programs, curricula, faculty, staff, and students. Division staff bring the perspectives of the world to NIU and the expertise of NIU to the world through international mobility for faculty, students, and ideas.

Study Abroad Programs

Director: Anne Seitzinger

The university offers a wide variety of opportunities for students to study abroad while continuing to remain enrolled at NIU. Most courses are approved equivalencies of current NIU courses and are applicable to campus degree programs with the approval of relevant academic departments. Students are covered by NIU’s accident and illness plan for students while overseas. Eligible students can apply their financial aid award toward overseas programs, and there are some scholarships available for study abroad. Courses are available in both the English language and in various foreign languages.

NIU is known nationally for the extensive study abroad programs that are offered to undergraduate and graduate students. Both graduate and undergraduate credit can be earned. The faculty-directed programs take place primarily during the summer and winter periods and range from three to nine weeks. Listed below are all of the study abroad programs that NIU currently offers. Students who would like more specific information should contact the Study Abroad Office.

Cosponsored Study Abroad and Exchange Programs
Director: Anne Seitzinger

These programs are open to undergraduate students only.

NIU currently offers programs worldwide for students from all majors and interests, for various periods of time. These programs include academic residential, academic internships, and one-on-one student exchanges in Europe, Latin America, Asia, Africa, and Australia. Cosponsored study abroad programs are administered by other institutions or organizations and supported by NIU. Students receive NIU credit if the program has been preapproved by the student’s academic department. On-site staff provide support and services for students. Cosponsored program sites include Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Costa Rica, Czech Republic, Denmark, Dominican Republic, Estonia, Fiji, Finland, Germany, Ghana, Hungary, Iceland, Ireland, Italy, Japan, Republic of Korea, La Réunion, Latvia, Malta, Mexico, The Netherlands, New Zealand, Nicaragua, Norway, Poland, Russia, Scotland, Senegal, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, and Uruguay.

NIU Administered (Faculty-Directed) Study Abroad Programs

NIU currently offers faculty-directed programs in 16 different countries. Most NIU administered programs are directed by an NIU faculty member, with cooperation from various NIU departments, and offer specialized credit and residential study abroad during the fall and spring semesters, summer session, and winter break period.

Unless otherwise noted, in all cases undergraduates must meet NIU undergraduate admission requirements, and graduate students must meet Graduate School requirements or apply for and obtain permission from the Graduate School to register as a student-at-large.

Brazil: Adult education. Mid May to early June. In cooperation with Universidade Federal da Paraiba campus João Pessoa. Examine the impact of economic neo-liberal policy, educational decentralization, and school municipalization in the educational system of Brazil. (UG or GR)

Costa Rica: International career development and Spanish language. Late May to late July. Intensive Spanish language instruction combined with individual professional programs in a wide variety of fields provides an opportunity to develop skills essential for an international career. Students must have a minimum two years college-level Spanish. (UG)

Costa Rica: Spanish language and culture. Late May to mid July. Provides immersion in the language and culture of contemporary Costa Rica. Minimum cumulative GPA of 2.75 and 3.00 in Spanish courses. (UG)

Czech Republic: From Tyranny to Freedom: Literature and the Rise and Fall of Totalitarianism in Twentieth-Century Europe. Late June to late July. Students will examine the major historical and political events of the twentieth century associated with totalitarianism---the first World War, the rise of Nazism, the Spanish Civil War, World War II, the Holocaust, Stalinism, and the post-war communism of the Soviet Union and its satellite states---in order to understand the enormity of totalitarianism in twentieth-century Europe and its impact on human consciousness. (UG or GR)

England: Oxford: English, political science, and biological studies. Late June to early August. Residential program at Oriel College that offers formal class meetings supplemented by individual tutorials. (UG or GR)

France: Agen: Law. Early June to mid July. In cooperation with the University of Bordeaux-Montequieu IV. Provides students with an understanding of two important areas of law: comparative law and European Union law. Open to NIU College of Law students and students from ABA-approved colleges or schools of law. (GR)

Ghana: Mid to late May. Provides students with an opportunity to explore aspects of the historical, cultural, and artistic foundations of West African civilization. Students experience the riches of Ghanaian life and culture, while also engaging in an educational experience at the University College of Education at Winneba, Ghana, and the University of Cape Coast, Ghana.

Ireland: Dublin: Media and culture in Ireland, and English and communication. Late June to mid July. In cooperation with Dublin City University. Examines Ireland's struggle to define its own cultural identity in a world of American and British media domination. (UG or GR)

Ireland: Selling Strategies. Early to mid January. Assists sales students in understanding the complexity and difficulty involved with selling in different countries (cultures). The program is also designed to help develop specific selling skills that are not typically taught at NIU. (UG)

Italy: Design and architecture in Italy. Late May to mid June. Onsite examination of past and current trends in design and architecture. (UG or GR)

Italy: Fashion in Florence: Mid to late May. Provides students with first-hand exposure to concepts learned in textile, apparel, and merchandising classes, and develop a more global perspective on the fashion industry. Students will visit world-renown fashion houses, retail stores, and museums, as well as visit sites that were an important part of the context that shaped design trends in western dress. (UG or GR)

Italy: Rome Eternal: An Unforgettable Experience. Mid May to mid June. Designed to give students an overview and a deeper understanding of the development of Western civilization through intense focus on one of its most important cities. Students will explore Rome through on-site study of its architecture as well as several museum visits designed to offer students an incomparable opportunity to confront and analyze great works of sculpture and painting in person. (UG or GR)

Malaysia: History and Culture. Mid to late December. Provides students with the opportunity to learn and experience the history of Malaysia and the Malay world, on site and in a living laboratory. (UG or GR)

Poland: Exploring Contemporary Graphic Design and Design Education. Mid March. Provides students with the opportunity to meet and work with students at the Academy of Fine Arts in Katowice. The program will integrate historical information and contemporary trends in European graphic design. (UG or GR)

Russia: Moscow: Theater and performance studies at the Moscow Art Theatre (MXAT). Early to late June. Directors, actors, theater scholars, and teachers of the MXAT school administer daily instruction to NIU School of Theatre and Dance students. Teaching focuses on acting, voice, movement, and Russian theater history. Students take daily classes at the MXAT school. (UG or GR)

Spain: Toledo: Late June to early August. In cooperation with the University of Castilla-La Mancha. Provides immersion in the language and culture of contemporary Spain. Minimum cumulative GPA of 2.75 and 3.00 in Spanish courses. (UG or GR)

Worldwide: International business seminars. Late December to mid January or mid May to mid June. Allows students interested in pursuing a career in international business or related field to acquire a firsthand view of international business practices and experience the excitement of traveling outside the United States. Includes visits to European manufacturing, retailing, and financial organizations/industries that engage in international business. (UG or GR)

Faculty-Directed Overseas Independent Research. Undergraduate or graduate credit for students traveling independently overseas who engage in a significant independent research project under the direction of a member of the NIU faculty. Type of academic credit and number of semester hours of credit dependent on the nature of the project and to be determined by the faculty member directing the research project. (UG or GR)

Course List

Also see "Inter-College and University-Wide Interdisciplinary Courses" for IDSP 301 and IDSP 401.

INTL 101. STUDY ABROAD PROGRAMS (1-9). Course work undertaken as part of an approved university study abroad program. Discipline-based course used to reflect credit given, with departmental approval, for course work for which there is no NIU equivalent course available. May be repeated to a maximum of 9 semester hours.

INTL 201. STUDY ABROAD PROGRAMS (1-9). Course work undertaken as part of an approved university study abroad program. Discipline-based course used to reflect credit given, with departmental approval, for course work for which there is no NIU equivalent course available. May be repeated to a maximum of 9 semester hours.

INTL 301. STUDY ABROAD PROGRAMS (1-9). Course work undertaken as part of an approved university study abroad program. Discipline-based course used to reflect credit given, with departmental approval, for course work for which there is no NIU equivalent course available. May be repeated to a maximum of 9 semester hours.

INTL 401. STUDY ABROAD PROGRAMS (1-9). Course work undertaken as part of an approved university study abroad program. Discipline-based course used to reflect credit given, with departmental approval, for course work for which there is no NIU equivalent course available. May be repeated to a maximum of 9 semester hours.

International Student and Faculty Office

The International Student and Faculty Office (ISFO) currently advises over 1000 nonimmigrant students and faculty from approximately 100 countries on various matters pertaining to their immigration status and success in their academic objectives in the United States. ISFO directs the admission process for international undergraduate students and cooperates closely with the Graduate School in the admission of international graduate students. In cooperation with a number of offices around campus, ISFO conducts the formal orientation program each fall and spring semester for new nonimmigrant students, to provide them with information and experiences which will ease their adjustment to the campus and to the United States. The ISFO is responsible for maintaining the institution's obligations under the United States Student and Exchange Visitor Program, which include but are not limited to updating the Student and Exchange Visitor Information System database regarding student status, immigration documents, enrollment hours, work authorizations, and any variance from current immigration regulations. ISFO provides ongoing support to international students, faculty, and staff as they become a part of the NIU campus community and assists students in participating actively in student organizations.

Special assistance is given to international faculty members in residence at NIU, especially on matters regarding their visa and immigration status, health insurance, and general campus access.

International Training Office

Director: Lina Davide-Ong, Ed.D.

The International Training Office (ITO) develops and implements high-impact, innovative, and results-driven training programs that address societal and institutional needs of developing countries. The International Training Office's programs and initiatives provide opportunities for NIU faculty, staff, and students to share their knowledge and expertise with training participants from diverse cultural backgrounds.

Since its establishment in 1981, the ITO has successfully implemented training programs that match participants' needs with the strengths, capacities, and interests that exist within the faculty of NIU. Through the years, the ITO has been a facilitator of change and an active partner in developing the human resource potentials of individuals, groups, and communities worldwide.

College of Law

LeRoy Pernell, J.D., dean
Malcolm L. Morris, J.D., associate dean
Leonard B. Mandell, J.D., associate dean for student services

The College of Law offers a three-year, full-time day program and limited enrollment, part-time study leading to the J.D. degree. Student enrollment is approximately 300. The College of Law is fully accredited by the American Bar Association and is a member of the Association of American Law Schools.

Housed in the south wing of Swen Parson Hall, the College of Law facilities are designed to maximize interaction between students and their law professors, an essential ingredient in a quality legal education. The law library provides ample space for intensive study and reflection in quiet privacy and the latest in electronic legal research tools. A multi-purpose moot courtroom, equipped with up-to-date audiovisual teaching aids, serves as a realistic setting for practical exercises in courtroom proceedings.

The *College of Law Bulletin* contains information regarding the degree program, academic requirements, application procedures, and tuition and fees. This bulletin is available from the College of Law, Office of Admission and Financial Aid, by phone at (800) 892-3050 or via the World Wide Web.

Graduate School

Rathindra N. Bose, Ph.D., vice president for research and dean of the Graduate School
Suzanne Willis, Ph.D., acting associate dean

A student who wishes to obtain a graduate degree must apply for and be granted admission to the Graduate School. Some courses numbered 400-499 may be offered for both undergraduate or graduate credit, but they carry graduate credit only for graduate-level students (graduate students and students-at-large); courses numbered 500-699 may be taken for graduate credit only by graduate-level students. A student interested in graduate study should refer to the current *Graduate Catalog* for details regarding graduate courses and degree programs available. See also "Early Admission of NIU Undergraduates" below.

The graduate degrees and certificates offered by the university are listed below by the name of the college and of the department or school in whihc that degree program is housed.

College of Business

Master of Business Administration (M.B.A.)

Department of Accountancy
Master of Accounting Science (M.A.S.)
Master of Science in Taxation (M.S.T.)

Department of Finance

Department of Management

Department of Marketing

Department of Operations Management and Information Systems
Master of Science (M.S.)
  Management Information Systems

College of Education

Department of Counseling, Adult and Higher Education
Master of Science in Education (M.S.Ed.)
  Adult and Higher Education
  Counseling
Doctor of Education (Ed.D.)
  Adult and Higher Education
  Counseling

Department of Educational Technology, Research and Assessment
Master of Science (M.S.)
  Educational Research and Evaluation
Master of Science in Education (M.S.Ed.)
  Instructional Technology
Doctor of Education (Ed.D.)
  Instructional Technology

Department of Kinesiology and Physical Education
Master of Science (M.S.)
  Sport Management
Master of Science in Education (M.S.Ed.)
  Physical Education
    with or without specialization in
    Adapted Physical Education
    Exercise Physiology/Fitness Leadership
    Pedagogy and Curriculum Development in Physical Education

Department of Leadership, Educational Psychology and Foundations
Master of Science in Education (M.S.Ed.)
  Educational Administration
  Educational Psychology
  Foundations of Education
  School Business Management
Educational Specialist (Ed.S.)
  Educational Administration
Doctor of Education (Ed.D)
  Educational Administration
  Educational Psychology

Department of Literacy Education
Master of Science in Education (M.S.Ed.)
  Reading
Doctor of Education (Ed.D.)
  Curriculum and Instruction
    with specialization in
    Reading

Department of Teaching and Learning
Master of Science in Education (M.S.Ed.)
Curriculum and Instruction
Early Childhood Education
Elementary Education
Special Education
with specialization in
Advanced Special Education Practices
Blind Rehabilitation
Early Childhood Special Education
Learning Behavior Specialist I
Orientation and Mobility
Visual Impairments
Doctor of Education (Ed.D.)
Curriculum and Instruction
with specialization in
Curriculum Leadership
Elementary Education
Secondary Education

College of Engineering and Engineering Technology

Department of Electrical Engineering
Master of Science (M.S.)

Department of Industrial Engineering
Master of Science (M.S.)

Department of Mechanical Engineering
Master of Science (M.S.)

Department of Technology
Master of Science (M.S.)
Industrial Management

College of Health and Human Sciences

School of Allied Health Professions
Master of Public Health (M.P.H.)
with or without specialization in
Health Promotion
Health Services Management
Master of Physical Therapy (M.P.T.)

Department of Communicative Disorders
Master of Arts (M.A.)
with specialization in
Audiology
Rehabilitation Counseling
Speech-Language Pathology
Doctor of Audiology (Au.D.)

School of Family, Consumer, and Nutrition Sciences
Master of Science (M.S.)
Applied Family and Child Studies
with or without specialization in
Marriage and Family Therapy
Nutrition and Dietetics

Department of Military Science

School of Nursing
Master of Science (M.S.)

College of Liberal Arts and Sciences

Department of Anthropology
Master of Arts (M.A.)

Department of Biological Sciences
Master of Science (M.S.)
with or without specialization in
Bioinformatics
Human Anatomical Sciences
Doctor of Philosophy (Ph.D.)

Department of Chemistry and Biochemistry
Master of Science (M.S.)
Chemistry
Doctor of Philosophy (Ph.D.)
Chemistry

Department of Communication
Master of Arts (M.A.)
Communication Studies

Department of Computer Science
Master of Science (M.S.)

Department of Economics
Master of Arts (M.A.)
Doctor of Philosophy (Ph.D.)

Department of English
Master of Arts (M.A.)
Doctor of Philosophy (Ph.D.)

Department of Foreign Languages and Literatures
Master of Arts (M.A.)
Foreign Languages
with specialization in
French
Spanish

Department of Geography
Master of Science (M.S.)

Department of Geology and Environmental Geosciences
Master of Science (M.S.)
Geology
Doctor of Philosophy (Ph.D.)
Geology

Department of History
Master of Arts (M.A.)
Doctor of Philosophy (Ph.D.)

Department of Mathematical Sciences
Master of Science (M.S.)
Applied Probability and Statistics
Mathematics
with specialization in
Applied Mathematics
Computational Mathematics
Mathematics Education
Pure Mathematics
Doctor of Philosophy (Ph.D.)

Department of Philosophy
Master of Arts (M.A.)

Department of Physics
Master of Science (M.S.)
with specialization in
Applied Physics
Basic Physics
Physics Teaching
Doctor of Philosophy (Ph.D.)

Department of Political Science
Master of Arts (M.A.)
Master of Public Administration (M.P.A.)
with specialization in
Comparative and Developmental Administration
Fiscal Administration
Human Services Administration
Public Management and Leadership
Urban Management
Doctor of Philosophy (Ph.D.)

Department of Psychology
Master of Arts (M.A.)
Doctor of Philosophy (Ph.D.)

Department of Sociology
Master of Arts (M.A.)
with or without specialization in
Criminology

College of Visual and Performing Arts

School of Art
Master of Arts (M.A.)
with specialization in
Art History
Studio Art
Master of Science (M.S.)
with specialization in
Art Education
Master of Fine Arts (M.F.A.)

School of Music
Master of Music (M.M.)
Performer's Certificate

School of Theatre and Dance
Master of Fine Arts (M.F.A.)
Theatre Arts
with specialization in
Acting
Design and Technology
Directing

Concentrations

A concentration is a course of study, typically interdisciplinary, linked to the pursuit of a specific graduate degree. Completion of the requirements for a concentration will result in an appropriate notation on the student's academic record.

The concentrations offered by the university are listed below.

Biochemistry
Biophysics
Historical Administration
Latin American Studies
Southeast Asian Studies

Certificates of Graduate Study

A certificate of graduate study is a course of study, not linked to the pursuit of a degree, consisting of a coherent set of courses, fewer than for a major, addressing a specific theme. Completion of the requirements for a certificate of graduate study will result in an appropriate notation on the student's academic record.

The certificates of graduate study offered by the university are listed below.
Adapted Physical Education
Advanced Quantitative Methodology in Education
Advanced Teaching Practices
Applied Mechanics
Applied Statistics
Assistive Technology Specialist
Behavior Specialist
Bioinformatics
Career Development
Computer-Aided Design and Computer-Aided Manufacturing
Curriculum Adaptations Specialist
Design of Thermal Systems
Digital Image Processing
Digital Signal Processing
Digital Systems
Earth Science Education
Eating Disorders and Obesity
Elementary Mathematics Teaching
English Education
Environmental Education
Family Nurse Practitioner
Foreign Language Instructional Technology
Foundations of Education
Geographic Information Analysis
German Language, Literature, and Culture
Gerontology
Health Education
Higher Education
Industrial Control
Industrial Project Management
Industrial Workplace Design Systems
Integrated Manufacturing Systems
Lesbian, Gay, Bisexual, and Transgender Studies
Management Information Systems
Multiple Disabilities Specialist
Museum Studies
Problem-Based Learning in Educational Psychology
Public Health
Public Management
Quality Control of Manufacturing Processes
Semiconductor Devices
Semiconductor Fabrication
Spanish Language, Literature, and Culture
Strategic Industrial Management
Teaching English as a Second Language and Bilingual Education
Technical Writing
Technology of Quality
Traffic Safety Education
Vibration and Control System Design
VLSI Design
Women's Studies

Student-at-Large Classification

The student-at-large classification is available for those who wish to take graduate courses without pursuing a degree. A student-at-large must hold a baccalaureate or higher degree from an accredited institution in the U.S. or the equivalent from a recognized foreign institution and must apply for and be granted permission to register as a student-at-large through the Graduate School. Students-at-large are not admitted to the Graduate School or to any graduate degree program, but they are under the administrative jurisdiction of the Graduate School. Many of the same regulations, including those regarding academic standing, apply to both graduate students and students-at-large, as described in the *Graduate Catalog*. Some departments and programs limit the amount of graduate credit earned as a student-at-large that may be applied toward meeting the requirements of a graduate degree, if the student-at-large is later admitted to such a degree program. Students should consult the *Graduate Catalog* for specific information about particular programs.

Postgraduate students are those who hold baccalaureate degrees from accredited institutions and wish to take additional undergraduate courses or to earn a second baccalaureate degree. Postgraduates are classified as seniors and may take 100- through 400-level courses for undergraduate credit only; a postgraduate may not take courses for graduate credit. An individual who wishes to take 500- or 600-level graduate courses or approved 400-level courses for graduate credit should apply to the Graduate School for admission as a graduate student or permission to register as a student-at-large. For further information, see "Postgraduate Students."

Early Admission of NIU Undergraduates to the Graduate School

Early admission to the Graduate School is available to seniors in their final term of enrollment at NIU who wish to take courses for graduate credit. Students who apply for and receive early admission may take approved 400-level courses and all 500-

and 600-level courses for graduate credit. The student granted early admission must inform the Graduate School, in writing, prior to the start of the final undergraduate term, which 400-level courses are being taken for undergraduate credit to complete the requirements for the baccalaureate degree, and this is subject to verification by the Graduate School. All other 400-level courses available for graduate credit must be taken for graduate credit.

Application for early admission is made through the Graduate School. A student applying for early admission must have applied to graduate from the baccalaureate program at the end of the term for which early admission is sought; the Graduate School's application deadlines are waived for such a student. No student may enroll more than one term under early-admission status.

University Libraries

Mary H. Munroe, M.A., interim dean
Mary H. Munroe, M.A., associate dean
H. Stephen Wright, M.M., associate dean
T. J. Lusher, M.A., assistant dean

The Northern Illinois University Libraries system consists of Founders Memorial Library, branch libraries which include Faraday Library, the Map Library, the Music Library, NIU Hoffman Estates Library, NIU Naperville Resource Center, and NIU Rockford Library, and the Regional History Center/University Archives. The University Libraries contain over 2 million volumes as well as numerous periodicals, government publications, microforms, maps, recordings, audiovisual materials, and electronic databases.

NIU Libraries are participants in the Illinet Online (I/O) System, a network involving 65 academic institutions throughout Illinois. Using computer workstations in the libraries and the World Wide Web, users may immediately determine which libraries own desired research materials. Materials not owned by NIU can be obtained quickly from other I/O member libraries.

Founders Memorial Library, the main library, has six levels with 314,000 square feet of space and seating capacity for 1600 students. The first floor houses key library services including the circulation desk, the reference desk, services to students with disabilities, library instruction, the information desk, document delivery services, the reserves collection, periodicals collection, and the newspaper reading room. Microforms and government publications are located on the second floor; rare books and special collections and the Southeast Asia collection are on the fourth floor. The upper three floors house circulating books and nonprint materials.

Faraday Library serves faculty and students in the disciplines of chemistry and physics. Similarly, the Music Library serves the music curriculum, and the Map Library contains maps and atlases for research in geography. NIU Hoffman Estates Library, NIU Naperville Library, and NIU Rockford Library service the needs of library users at those sites. Regular, interim, and holiday hours are posted near the entrance to each library.

NIU libraries provide a variety of guides to collections and services. These materials are available at the information desk and at service sites throughout Founders Memorial Library. Instruction in the use of the library is given to classes by librarians as part of the University Libraries library instruction program. Library instruction covers both basic library orientation and, for upperlevel classes, in-depth instruction related to materials in particular subject areas.

Libraries Faculty

Byron Anderson, M.L.S. & M.A., University of Wisconsin, Milwaukee, professor
William Baker, M.L.S., Loughborough University, M.Phil. & Ph.D., University of London, Presidential Research Professor
Jana Brubaker, M.L.S., Indiana University, M.A., Northern Illinois University, assistant professor
Michael J. Duffy IV, M.L.I.S., Dominican University, M.M., Northwestern University, assistant professor
Mary Frances Grosch, M.S.L.S. & M.B.A., University of Illinois, associate professor
Edward Grosek, M.L.S., State University of New York at Albany, M.S., College of St. Rose, associate professor
Karen Hovde, M.A., Western Washington University, M.A., Northern Illinois University, associate professor
Jitka Hurych, M.A., Northern Illinois University, M.A., Purkyne (formerly Masaryk) University, Czechoslovakia, professor
Ladislava Khailova, M.L.I.S. & Ph.D., University of South Carolina, assistant professor
Charles Larry, M.A. & M.F.A., Northern Illinois University, associate professor
Leanne Lauer, M.S.L.S., Catholic University, M.S.W., Fordham University, Tarrytown, assistant professor
David F. Lonergan, M.S.L.S., University of North Carolina, Ph.D., Pennsylvania State University, associate professor
T. J. Lusher, M.L.I.S., University of Iowa, M.A., Iowa State University, associate professor
Rebecca A. Martin, M.L.I.S., University of Wisconsin, Milwaukee, M.A., Kent State University, associate professor
James Millhorn, M.A.L.S., University of Iowa, M.A., University of Oklahoma, associate professor
Mary H. Munroe, M.A., University of South Carolina, M.Ln., Emory University, professor
Chalermsee Olson, M.A., University of Pittsburgh, M.A., Northern Illinois University, associate professor
Nestor L. Osorio, M.A. & M.L.S., State University of New York, Geneseo, professor
Junlin Pan, M.A.L.S. & Ph.D., University of Arizona, M.S., Southwest Missouri State University, assistant professor
Robert B. Marks Ridinger, M.L.S., University of Pittsburgh, M.A., Case Western Reserve University, professor
Earl R. Shumaker, M.S., Louisiana State University, associate professor
Vincent P. Tinerella, M.A., DePaul University, M.L.I.S., Dominican University, assistant professor
Paul Webb, M.S., University of Illinois, M.A., Southern Illinois University, assistant professor
H. Stephen Wright, M.L.S. & M.M., Indiana University, professor
Regional History Center and University Archives
Glen A. Gildemeister, M.A., Ph.D., Northern Illinois University, director
Cindy S. Ditzler, M.A., Western Illinois University, archivist

University Press

Founded in 1965, the Northern Illinois University Press publishes scholarly work and books of general interest. Most of its books are in the humanities and social sciences, but it also publishes in the various fields of science and the arts. Regional topics are a special focus. Seeking to advance knowledge about its region, the press has published a wide range of books on the archaeology, history, literature, and culture of northern Illinois and Chicago. At present, there are about 320 titles in print.

The publication of any book through NIU Press must be approved by the University Press Board, a faculty committee made up of representatives of the colleges and chaired by the vice president for research and graduate studies. The main function of the board is to assure high standards of quality in all the publications of the university press.

One of three state-supported presses in Illinois, the NIU Press has been a member of the Association of American University Presses since 1972.

Illinois Articulation Initiative Core Curriculum

Effective fall semester 1998 and after for new transfer students and students reentering NIU with an A.A. or A.S. degree from an Illinois public community college, Northern Illinois University is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois transferable General Education Core Curriculum (GECC) between participating institutions. Successful completion of the GECC at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and allows students to transfer this portion of an associate or baccalaureate degree from one participating IAI institution to another without incurring a loss of credit.

See an academic adviser for additional information and/or read about the IAI at www.iTransfer.org.

IAI General Education Core Curriculum Requirements

Communication–9 semester hours: a two-course sequence in writing (6) and one course in oral communications (3)

Mathematics–3-6 semester hours

Physical and life sciences–7-8 semester hours: one course in life sciences and one course in physical sciences, at least one of which must be a laboratory course

Humanities and fine arts–9 semester hours: one course in humanities, one course in fine arts, and one course from either humanities or fine arts

Social and behavioral sciences–9 semester hours: three courses selected from at least two disciplines

IAI Codes

The following IAI codes identify qualifying general education courses.

C	Communication
F	Fine arts
H	Humanities
L	Life sciences
M	Mathematics
P	Physical sciences
S	Social/behavioral sciences

Applicable NIU Courses

NIU Course Number/Title	IAI Number
Communication	
ENGL 103 - Rhetoric and Composition I	C1 900
ENGL 104 - Rhetoric and Composition II	C1 901R
ENGL 105 - Rhetoric and Composition	C1 901R
COMS 100 - Fundamentals of Oral Communication	C2 900
Mathematics	
MATH 101 - Core Competency in Mathematics	M1 901
MATH 206 - Introductory Discrete Mathematics	M1 905
MATH 210 - Finite Mathematics	M1 906
MATH 211 - Calculus for Business and Social Science	M1 900-B
MATH 229 - Calculus I	M1 900-1
MATH 230 - Calculus II	M1 900-2
MATH 232 - Calculus III	M1 900-3
Physical and Life Sciences	
BIOS 101 - Plant Products and Human Affairs	L1 901
BIOS 103 - General Biology	L1 900
BIOS 104 - General Biology	L1 900L
BIOS 105 - General Biology Laboratory	L1 900L
BIOS 106 - Environmental Biology	L1 905
BIOS 109 - Human Biology	L1 904
CHEM 110 - Chemistry	P1 902
CHEM 110 - Chemistry, and CHEM 111 - Chemistry Laboratory	P1 902L
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Legal Notices

Although the university attempts to accommodate the course requests of students, course offerings may be limited by financial, space, and staffing considerations or may otherwise be unavailable. Nothing in this catalog may be construed to promise or guarantee registration in any course or course of study (whether required or elective) nor may anything be construed to promise or guarantee the completion of an academic program within a specified length of time.

Student Responsibility for Obtaining Current University Information

The university reserves the right to make changes in admission requirements, fees, degree requirements, and other specifications set forth in this catalog. Such changes take precedence over catalog statements. While reasonable effort is made to publicize such changes, students should remain in close touch with departmental advisers and appropriate offices, because responsibility for complying with all applicable requirements ultimately rests with the student.

Human Rights Statement

Northern Illinois University is an equal opportunity/affirmative action institution and does not discriminate on the basis of race, color, religion, sex, age, marital status, national origin, disability, status based on the Victims' Economic Security and Safety Act (VESSA), or status as a disabled veteran or Vietnam-era veteran, or any other factor unrelated to professional qualifications, in employment or in admission or access to, treatment in, or operation of its educational programs and activities. Such discrimination is prohibited by Titles VI and VII of the Civil Rights Act, Title IX of the Education Amendments, Sections 503 and 504 of the Rehabilitation Act of 1974, the Age Discrimination Acts of 1974 and 1975, the Vietnam-Era Veterans' Readjustment Assistance Act of 1974, Titles I-VI of the Victims' Economic Security and Safety Act, and other federal and state statutes and regulations. Inquiries concerning application of Title IX, Section 504, and other statutes and regulations may be referred to the Affirmative Action and Diversity Resources Center, 1515 W. Lincoln Highway, DeKalb, IL 60115, telephone (815) 753-1118, or to the director of the Office of Civil Rights, U.S. Department of Education, Washington, D.C. 20024. The Constitution and Bylaws of Northern Illinois University afford equal treatment regardless of political views or affiliation, sexual orientation, or other factor unrelated to scholarly or professional performance (Constitution Article 9, Section 9.2; Bylaws Article 5, Section 5.211; Bylaws Article 7, Section 7.25 and Section 7.252; Bylaws Article 10; and Bylaws Article 18).

Immigration Reform and Control Act Regulations Affecting Employment by the University

The 1986 Immigration Reform and Control Act mandates that any person beginning employment at Northern Illinois University after November 6, 1986, must either be a U.S. citizen or possess *current* employment authorization from the U.S. Immigration and Naturalization Service. All such employees must be prepared to present *original* documentation to the employing department/cost center within three days of the reporting date on their employment contract or risk cancellation of the contract.

Conflict of Interest Policy for All University Employees

All employees of the university must conform with the ethics policies as set forth in the university's "Conflict of Interest Document" available in department offices and at the Graduate School. This document requires that all employees of the university, including students employed on a part-time basis or as graduate assistants, report on specified forms all real, potential, and apparent conflicts of interest.

Storage in University Buildings

Students electing to utilize university buildings and/or facilities for the storage of personal property owned by them, thereby accept the responsibility for such storage and waive any and all responsibility and liability on the part of the university and its employees for loss of or damage to such personal property by any cause whatsoever including, but not limited to fire, water, windstorm, or other casualty, theft, or improper or inadequate humidity control.

Student Information and Records

Information and data concerning individual students are collected, maintained, and used by the university only as needed in relation to its basic educational purposes and requirements. Presently, relevant policy and procedures are designed and operated to be in compliance with federal legislation, specifically, the Family Educational Rights and Privacy Act of 1974 as amended by Senate Joint Resolution 40, signed into law by the President of the United States on December 31, 1974. The official university procedures and a directory of educational records maintained by NIU are available for review in the Office of Registration and Records. All questions, interpretations, or clarifications involving university policy and procedures are to be directed to the University Legal Counsel.

There are four basic types of student records: academic, financial, medical, and placement. The official academic record is established and kept current by the Office of Registration and Records. It is a cumulative history of the student's registration and educational participation and performance. Maintained in connection with the academic record is certain biographical and personal identification information as needed for enrollment purposes. Parts or all of these student data are provided by the Office of Registration and Records as needed to the university's academic offices, colleges, schools, and departments for academic administration and advisement, and to other university administrative units as necessary for the functioning of various student and support services.
Student financial records are the responsibility of the Office of

the Bursar, with respect to the billing, payment, and accounting of tuition and fees, and the Office of Student Financial Aid for operation of the university's student financial assistance program. The Bursar keeps a complete record of student financial transactions relative to the payment of the university charges which are accrued. Within Financial Aid, the student file contains all necessary information regarding scholarships, grants, loans, and employment which are part of the student financial assistance program including institutional, organizational, federal, and state sources.

A health record is created and maintained at Health Services for all students who have submitted information or received medical care at Health Services. Only information pertinent to the health of the individual is included therein. Health Services medical records may be destroyed six years after the last date medical services were provided.

Career Services, with the student's voluntary participation, creates and distributes to potential employers a copy of a file which consists of a self-completed resume and various personal references.

Certain records within the university community are exempt from the above-cited federal legislation: records of instructional, supervisory, and administrative personnel which are the possession only of the maker and not accessible nor revealed to any other person except a substitute; files within the University's Department of Public Safety (University Police); and medical records used in connection with the provision of treatment for a student. Access to these is strictly limited to the university staff immediately involved with their creation and maintenance except for certain specific qualifications.

Further, the university is not required to make available to a student the financial records of his or her parents nor confidential letters and statements of recommendation which were placed in students' files prior to January 1, 1975, if such are used only for the purpose specifically intended.

Access to or release of each of the above types of records or their respective parts, or of any personally identifiable information, with the previous exceptions noted, is restricted to the following: the student or former student; parents of a legally defined dependent student (reference Section 152 of the Internal Revenue Code of 1954); university officials who have a legitimate university-related educational or administrative interest and need to review an education record in order to fulfill their professional responsibility; certain specified state and federal representatives primarily as concerns the evaluation and auditing of government-funded programs in which the university participates; officials of other colleges, universities, or schools in which the student intends to enroll, provided the student is informed of this type of request in advance of the information being released; individuals, agencies, and organizations in connection with the student's application for or receipt of financial aid; state and local officials as directed by State Statute adopted prior to November 19, 1974; with certain restrictions, organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction; accrediting organizations; and appropriate persons in connection with an emergency, if knowledge of such information is necessary to protect the health or safety of a student or other person. A university official for the purposes of this section is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. In all other instances, access or release may be granted only with the written authorization of the student. In cases where such records are to be furnished in compliance with a judicial order or pursuant to a lawfully issued subpoena, prior to their release students shall be notified of such order or subpoena by personal service or certified mail to their last known address.

The student has the right to review personally his or her records in the presence of a university representative at an appropriate or convenient campus location. The student should submit a written request to the appropriate university office identifying the record(s) he or she wishes to inspect. The university office will make arrangements for access and notify the student of the time and place where the records may be inspected within 45 days following receipt of such request. Where necessary, interpretation of the record shall be provided by qualified university personnel. Original records cannot be removed from university premises. A copy may be provided where failure to provide such copy would effectively prevent a student from exercising the right to inspect and review the educational records. While a charge may be made to cover costs of reproduction, in most instances this is not done. However, normal operational fees exist with respect to record reproduction within Career Services, dependent upon the number of copies requested, and the Office of Registration and Records.

A student has the right to challenge the content of a record on the grounds that it is inaccurate, misleading, or otherwise in violation of privacy or other rights and to have inserted in the record his or her written explanation of its contents. To initiate such a challenge, the student shall, within 60 days after he or she has inspected and reviewed the record in question for the first time, file with the university office responsible for maintaining such records a written request for a hearing, in a form specified by the university. Within 30 days following receipt of such request the head of such office, or a designated representative, shall review the record in question with the student and either order the correction or amendment of such alleged inaccurate, misleading, or otherwise inappropriate portions of the record as specified in the request or notify the student of the right to a hearing at which the student and other persons directly involved in the establishment of the record shall have an opportunity to present evidence to support or refute the contention that the portions of the record specified in the request are inaccurate, misleading, or otherwise inappropriate. The student shall be given written notice of the time and place of such hearing not fewer than 10 working days in advance. The hearing will be conducted by a university representative who does not have a direct interest in the outcome. The student shall have the right to attend the hearing, to be represented and advised by other persons, and to call witnesses in his or her behalf. The student shall be notified in writing of the decision within 10 working days following the hearing or within 10 working days of a decision without a hearing. Such decision is final.

The student may waive the right of access to confidential statements submitted with respect to application for admission to the Graduate School or another educational institution, an application for employment, or receipt of an honor or honorary recognition. However, the student cannot be required to do so. Further, the student who does waive right of access will be provided, upon request, with the names of all persons making confidential recommendations.

Directory information pertaining to students, as defined below, may be released by the university at any time provided that it publish this definition at least once each academic year in the campus student newspaper and the individual student is given a reasonable period of time to inform the university that such information is not to be released without his or her prior consent. Such information is never knowingly provided any requestor for a commercial purpose. Directory information includes the student's name, address, telephone listing, e-mail address and photographic or electronic picture or image, date and place of birth, major field of study, classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance and full- or part-time status, degrees and awards received, and the most recent previous educational agency or institution attended by the student.
Students who believe that their privacy rights under the Family

Educational Rights and Privacy Act of 1974 have been violated, have the right to file a complaint with the Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, S.W., Washington, D.C. 20202-4605.

Conduct and Discipline Regulations

It is expected that all enrolled students intend to engage in serious educational pursuits. When students accept admission to NIU, the university assumes that they thereby agree to conduct themselves in accordance with its standards.

The university expects all of its students, both on and off the campus, to conduct themselves in accordance with the usual standards of society and law-abiding citizenship. Every organization affiliated with the university or using its name is expected to conduct all its affairs in a manner creditable to the university.

While enrolled, students are subject to university authority. The university has the prerogative, in the interest of all of its students, to suspend or require the withdrawal of a student or group of students for acting in such a manner as to make it apparent that the student or group of students are not desirable members of the university. See also "Classroom Disruption" under "Academic Regulations." Copies of the most current Student Judicial Code may be obtained from Judicial Affairs.

General Regulations

Students at Northern Illinois University are expected to abide by the university regulations set forth below as well as by applicable federal, state, and local laws. While the university will normally apply disciplinary sanctions only for violations of its regulations, a student is subject to public laws at all times, including the Illinois Compiled Statutes which contain provisions specifically directed at maintaining the orderly operation of state colleges and universities. It is the responsibility of the student to be particularly aware of the provisions of the Criminal Code in the Illinois Compiled Statutes and to be aware of the penalties therein provided for Criminal Damage to State Supported Property, Criminal Trespass to State Supported Land, Unauthorized Possession or Storage of Weapons, and Interference with a Public Institution of Higher Education.[1] Conviction for offenses enumerated in the Criminal Code additionally makes almost certain the loss of federal- and state-supported scholarships, loans, or other grants.

Failure to abide by the following regulations may result, after a hearing by one of the University Judicial Boards or a representative of Judicial Affairs, in disciplinary sanctions including, but not limited to warning, disciplinary probation, suspension, and dismissal from the university.

Sanctions may result from

academic dishonesty. Plagiarism, cheating, knowingly supplying false or misleading information to university officials or on official university records, forgery, and alteration or misuse of university documents, records, or identification cards all are prohibited.

obstruction or disruption of university activities. A student or students may not knowingly or willfully interfere with the normal educational activities of the university including teaching, research, administration, disciplinary procedures, or other university activities, including its public service functions. Disruption of university activities includes but is not limited to obstruction of access to the facilities of the university including corridors and doorways; interference with classroom activities or other scheduled events; interference with the performance of the duties of any institutional employee. Picketing may be permitted, but only under the following conditions: Students who picket on university premises must do so in peaceful and orderly fashion. Picketing should not involve invasion of the rights of others, interference with the operations of the university, or jeopardy to public order and safety. Specifically, the following conditions must be met.

Automobile, bicycle, and pedestrian traffic must not be obstructed.

Entrances to buildings and driveways must not be blocked or traffic interfered with.

Picketing inside university buildings is prohibited.

There will be no disturbing of classes by noise or by other means.

There will be no harassing of passers-by or other interference with their activities.

There will be no damage to property, including lawns and shrubs, nor littering of premises with signs, leaflets, or other materials.

failure to abide by regulations governing the use of university premises and facilities. No student shall remain alone or with others in a university building beyond its normal closing hours unless duly authorized by a university official nor shall an individual remain in a university building after being notified to depart there from by an authorized university official. Unauthorized entry to or use of university facilities is also prohibited.

theft or damage. A student or students may take no action or actions which damages or which as a probable consequence could damage property of the university or private property.

physical abuse of persons. A student or students may take no action or actions which disrupts or which as a probable consequence could disrupt the public peace or which endangers the safety, health, physical or mental well being, or life of any person.

dangerous and narcotic drugs. A student may not use, possess, sell, or distribute any of the narcotic, dangerous, or hallucinogenic drugs in any form except under the direction of a licensed physician or as expressly permitted by law.

firearms. Students may not have or keep any firearm on their persons, in their quarters, or in their motor vehicles at any time while on university property except with the permission of the chief security officer of the university.

alcoholic beverages. Delivery and sale of alcoholic beverages on university property is prohibited. Possession and use of alcoholic beverages on university property is restricted by the laws of the state of Illinois as to age and by the regulations of the university as to physical location.

instructions from university officials. A student must follow the oral or written instructions regarding university regulations or state law given by any university official whom the Board of Trustees or the President has vested with the authority to give such instructions.

university regulations. Students are responsible for knowing and abiding by university regulations and policies, including those not specifically enumerated in these general regulations, concerning such matters as the meeting of financial obligations to the university, university motor vehicle and parking regulations, registration of student organizations, as well as specific rules governing the use of particular facilities such as the residence halls, the libraries, and the Holmes Student Center.

[1] In addition, the Criminal Code in the Illinois Compiled Statutes contains provisions relating to disorderly conduct, theft, inflicting bodily harm, arson, property damage, gambling, the use of drugs, mob action, and sex offenses.

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32 Neptune Hall West
9 Stevenson Towers North (C & D)
8 Stevenson Towers South (A & B)
14 University Family Apartments

Recreation Facilities
21 Evans Field House
36 Holmes Student Center
7 Huskie Stadium
2 Convocation Center
16 Student Recreation Center

Museums and Theatres
29 Anthropology Museum
53 Boutell Memorial Concert Hall
54 Jack Olson Gallery
50 NIU Art Museum
29 O'Connell Theatre
29 Players Theatre

Service Facilities
23 Campus Child Care Center
3 Document Services
5 Dorland Building
59 East Heating Plant
6 Grounds Building
63 Health Services
3 Human Resource Services
3 NIU Center for Diversity Resources
1 NIU Center for the Study of Family Violence and Sexual Assault
38 NIU Parking Deck
42 Campus Parking Services
4 Physical Plant
60 Public Safety (NIU Police)
13 West Heating Plant

Not Shown on Map
Art Annex
2211 Sycamore Road, DeKalb

Business and Industry Services
1120 East Diehl Road
Naperville, Illinois 60563

Center for Child Welfare and Education
University City, Unit H
817 West Lincoln Highway, DeKalb

Illinois Council on Economic Education (ICEE)
155 North Third Street, Suite 504, DeKalb

Lorado Taft Field Campus
Oregon, Illinois 61061

NIU Art Museum Gallery in Chicago
215 West Superior Street
Chicago, Illinois 60610

NIU Broadcast Center
801 North First Street, DeKalb

NIU Hoffman Estates
5555 Trillium Boulevard
Hoffman Estates, Illinois 60196

NIU Naperville
1120 East Diehl Road
Naperville, Illinois 60563

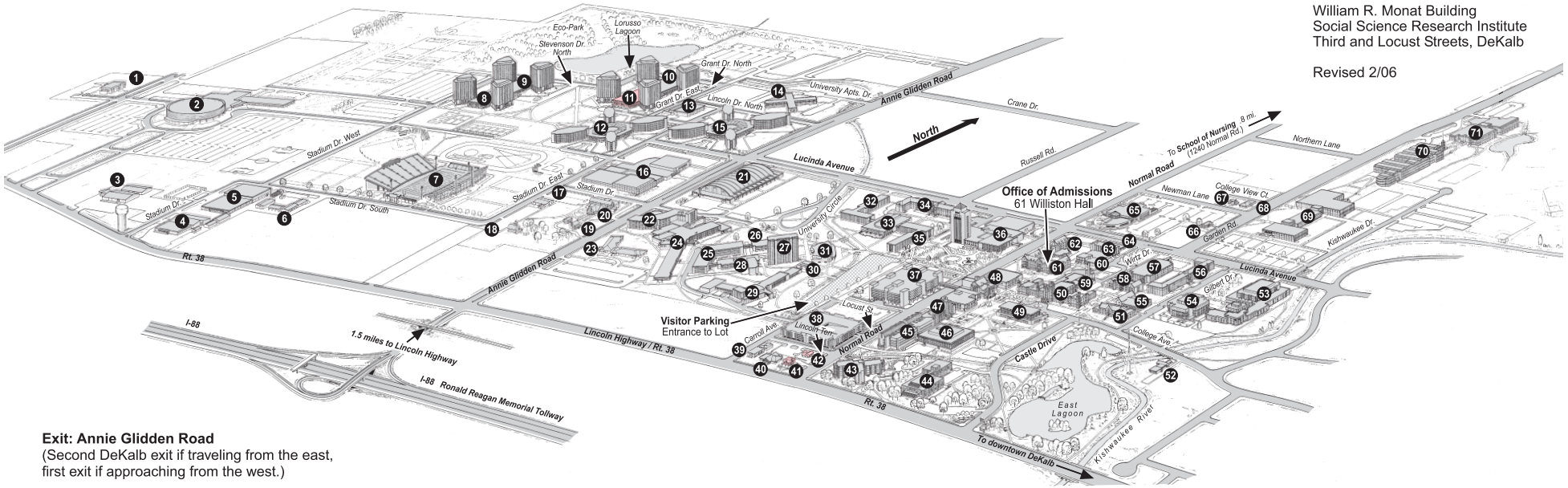
NIU Rockford
8500 East State Street
Rockford, Illinois 61108

NIU School of Nursing
1240 Normal Road, DeKalb

William R. Monat Building
Social Science Research Institute
Third and Locust Streets, DeKalb

Revised 2/06

NORTHERN ILLINOIS UNIVERSITY



Exit: Annie Glidden Road
(Second DeKalb exit if traveling from the east, first exit if approaching from the west.)

Directions to NIU. NIU's main campus in DeKalb, Illinois, is located 1.5 miles north of the Ronald Reagan Memorial Tollway (I-88). The city is also accessible via state highways 38 and 23. First-time visitors exiting from the I-88 are advised to use the Annie Glidden exit as this is the most clearly marked approach to the campus.

Visitor Parking. Visitor Parking is available in a pay lot southwest of the Holmes Student Center at the intersection of Carroll Avenue and Locust Street.

Northern Illinois University,
Department of Geography
www.niu.edu/geog