



**Northern Illinois
University**

**UNDERGRADUATE
CATALOG
2014-15**

Effective Fall Semester 2014

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. For students with no college affiliation, questions on regulations and their interpretations should be addressed to the Academic Advising Center.

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 and prospective students from the university's bookstore. The catalog is online at catalog.niu.edu.

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 catalog.niu.edu.

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.

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. The online catalog can be found at <http://catalog.niu.edu>. Beginning with the 2006-07 academic year, the online catalog is the definitive version of program descriptions and of academic policies and procedures.

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@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: housingdining@niu.edu

Disability Resource Center
Northern Illinois University
DeKalb, IL 60115-2879
815-753-1303 (voice/TTY)
E-mail: drc@niu.edu

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 2014-15

Effective Fall Semester 2014

College of Business

College of Education

**College of Engineering and Engineering
Technology**

College of Health and Human Sciences

College of Liberal Arts and Sciences

College of Visual and Performing Arts

Recycled paper

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 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 1973, 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 factors 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).

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Contents

Academic Year Calendar	4	Non-Governmental Organization Leadership and Development Center	300
A Guide to Reading This Catalog	7	Philosophy	303
An Introduction to NIU	10	Physics	306
Undergraduate Academic Programs	13	Political Science	311
Admission	17	Psychology	319
Limited Admissions and Limited Retention Requirements	24	Public Administration	323
University Graduation Requirements	30	Sociology	325
Other Graduation Requirements	40	College of Visual and Performing Arts	330
Educator Licensure Requirements	42	Art and Design	331
Academic Regulations	45	Music	340
Expenses	56	Theatre and Dance	351
Financial Aid and Scholarships	58	Inter-College Interdisciplinary Certificates and Programs	358
University Services	66	Inter-College and University-Wide Interdisciplinary Courses	361
College of Business	73	Other Academic Units	363
Accountancy	76	Center for Black Studies	363
Finance	80	Center for Burma Studies	363
Management	84	Center for Latino and Latin American Studies	363
Marketing	89	Center for Southeast Asian Studies	363
Operations Management and Information Systems	93	Regional History Center	364
College of Education	98	International Programs	364
Counseling, Adult and Higher Education	101	College of Law	366
Educational Technology, Research and Assessment	102	Graduate School	367
Kinesiology and Physical Education	104	University Libraries	370
Leadership, Educational Psychology and Foundations	114	University Press	371
Literacy Education	117	Illinois Articulation Initiative Core Curriculum	372
Special and Early Education	121	University Administration	374
College of Engineering and Engineering Technology	127	Legal Notices	376
Electrical Engineering	130	Index	380
Industrial and Systems Engineering	135		
Mechanical Engineering	141		
Technology	145		
College of Health and Human Sciences	155		
Allied Health and Communicative Disorders	159		
Family, Consumer, and Nutrition Sciences	165		
Military Science	178		
Nursing and Health Studies	181		
College of Liberal Arts and Sciences	191		
School of Public and Global Affairs	207		
Anthropology	208		
Biological Sciences	214		
Chemistry and Biochemistry	221		
Communication	227		
Computer Science	236		
Economics	240		
English	244		
Environmental Studies	251		
Foreign Languages and Literatures	256		
Geography	268		
Geology and Environmental Geosciences	275		
History	282		
Mathematical Sciences	290		

Academic Year Calender

Fall Semester 2014

April-August

New student and family orientation sessions

August 18-22, Monday-Friday

Department, college, and university faculty meetings

August 25, Monday

Classes begin

August 31, Sunday

Last day for undergraduates to add or drop a **first-half-semester or full-semester** course via self-service in MyNIU

September 1, Monday

Last day to apply for Fall 2014 graduation via self-service in MyNIU

September 1, Monday

Labor Day (university closed)

September 5, Friday

Last day for undergraduates to add a **first-half-semester or full-semester** course with approval of course department

September 5, Friday

Last day for undergraduates to drop a **first-half-semester or full-semester** course with approval of major college

September 8, Monday

Last day for undergraduates to make up a mark of "I" (incomplete) from the Spring 2014 semester

September 12, Friday

Last day for undergraduates to change a **full-semester** course from credit to audit or from audit to credit

September 12, Friday

Last day for undergraduates to change a **first-half-semester** course from credit to audit or from audit to credit

September 19, Friday

Last day for undergraduates to withdraw from a **first-half-semester** course without academic jeopardy

October 17, Friday

Last day for undergraduates to withdraw from a **full-semester** course or from the university without academic jeopardy

October 19, Sunday

End of the **first-half** of the semester

October 20, Monday

Beginning of the **second-half** of the semester

October 26, Sunday

Last day for undergraduates to add or drop a **second-half-semester** course via self-service in MyNIU

October 27, Monday

Last day for undergraduates to add a **second-half-semester** course with approval of course department

October 27, Monday

Last day for undergraduates to drop a **second-half-semester** course with approval of major college

November 7, Friday

Last day for undergraduates to change a **second-half-semester** course from credit to audit or from audit to credit

November 14, Friday

Last day for undergraduates to withdraw from a **second-half-semester** course without academic jeopardy

November 14, Friday

Last day for undergraduates enrolled **only** in **second-half-semester** courses to withdraw from the university without academic jeopardy

November 21, Friday

Last day to change or declare a major to be effective for the fall semester

November 26-30, Wednesday-Sunday

Thanksgiving break

December 1, Monday

Classes resume

December 6, Saturday

Classes end

December 8, Monday

Last day for undergraduates to make up a mark of "I" (incomplete) from the Summer 2014 session

December 8-13, Monday-Saturday

Final examinations

December 14, Sunday

End of fall semester

December 14, Sunday

Undergraduate fall commencement and degree conferral

June 2014

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 2014

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 2014

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 2014

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 2014

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 2014

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 2015

October-January

New student and family orientation sessions

January 5-9, Monday-Friday

Department and college faculty meetings

January 12, Monday

Classes begin

January 18, Sunday

Last day for undergraduates to add or drop a **first-half-semester or full-semester** course via self-service in MyNIU

January 19, Monday

Martin Luther King, Jr. Day (university closed)

January 23, Friday

Last day for undergraduates to add a **first-half-semester or full-semester** course with approval of course department

January 23, Friday

Last day for undergraduates to drop a **first-half-semester or full-semester** course with approval of major college

January 30, Friday

Last day for undergraduates to change a **full-semester** course from credit to audit or from audit to credit

January 30, Friday

Last day for undergraduates to change a **first-half-semester** course from credit to audit or from audit to credit

February 1, Sunday

Last day to apply for Spring 2015 graduation via self-service in MyNIU

February 6, Friday

Last day for undergraduates to withdraw from a **first-half-semester** course without academic jeopardy

March 6, Friday

Last day for undergraduates to withdraw from a **full-semester** course or from the university without academic jeopardy

March 7, Saturday

End of the **first-half** of the semester

March 8-15, Sunday-Sunday

Spring recess

March 16, Monday

Classes resume and beginning of **second-half** of semester

March 22, Sunday

Last day for undergraduates to add or drop a **second-half-semester** course via self-service in MyNIU

March 23, Monday

Last day for undergraduates to add a **second-half-semester** course with approval of course department

March 23, Monday

Last day for undergraduates to drop a **second-half-semester** course with approval of major college

April 3, Friday

Last day for undergraduates to change a **second-half-semester** course from credit to audit or from audit to credit

April 10, Friday

Last day for undergraduates to withdraw from a **second-half-semester** course without academic jeopardy

April 10, Friday

Last day for undergraduates enrolled **only** in **second-half-semester** courses to withdraw from the university without academic jeopardy

April 13, Monday

Last day for undergraduates to make up a mark of 'I' (incomplete) from the Fall 2014 semester April 17, Friday

Last day to change or declare a major to be effective for the spring semester

April 30, Thursday

Classes end

May 1, Friday

Reading Day

May 2, 4-8, Saturday, Monday - Friday

Final examinations

May 9, Saturday

Undergraduate spring commencement and degree conferral

May 10, Sunday

End of spring semester

December 2014

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 2015

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 2015

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 2015

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 2015

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 2015

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					

Summer Session 2015

June 15, Monday

Last day to apply for Summer 2015 graduation via self-service in MyNIU

June 15, Monday

Classes begin

June 17, Wednesday

Last day for undergraduates to add or drop a **first-half-session** or **full-session** course via self-service in MyNIU

June 18, Thursday

Last day for undergraduates to change a **first-half-session** course from credit to audit or from audit to credit with major college approval

June 19, Friday

Last day for undergraduates to add a **first-half session** or **full session** course with approval of course department

June 19, Friday

Last day for undergraduates to drop a **first-half or full session** course with approval of major college

June 22, Monday

Last day for undergraduates to change a **full-session** from credit to audit or from audit to credit

June 26, Friday

Last day for undergraduates to withdraw from a **first-half-session** course without academic jeopardy

June 26, Friday

Last day for undergraduates enrolled **only** in **first-half-session** courses to withdraw from the university without academic jeopardy

July 3, Friday

Independence Day Holiday (university closed)

July 10, Friday

Last day for undergraduates to withdraw from a **full-session** course without academic jeopardy

July 10, Friday

Last day for undergraduates enrolled **only** in **full-session** courses to withdraw without academic jeopardy

July 12, Sunday

End of the **first-half session**

July 13, Monday

Beginning of **second-half session**

July 15, Wednesday

Last day for undergraduates to add or drop a **second-half-session** course via self-service in MyNIU

July 17, Friday

Last day for undergraduates to declare a major effective summer session

July 17, Friday

Last day for undergraduates to change a **second-half-session** course from credit to audit or from audit to credit

July 17, Friday

Last day for undergraduates to add a **second-half-course** with approval of course department

July 17, Friday

Last day for undergraduates to drop a **second-half-session** course with approval of major college

July 24, Friday

Last day for undergraduates to withdraw from a **second-half-session** course without academic jeopardy

July 24, Friday

Last day for undergraduates enrolled **only** in **second-half-session** courses to withdraw from the university without academic jeopardy

August 9, Sunday

End of summer session

August 9, Sunday

Degree conferral

A Guide to Reading This Catalog

Course Designators

ACCY–Accountancy	GEOG–Geography
AHCD–Allied Health and Communicative Disorders	GEOL–Geology
AHLS–Medical Laboratory Sciences	HIST–History
AHPT–Physical Therapy	IDSP–Inter-College Interdisciplinary
AHRS–Rehabilitation Services	IEET–Interdisciplinary Engineering and Engineering Technology
ANTH–Anthropology	ILAS–Interdisciplinary Liberal Arts and Sciences
ART–Art	INTL–International Programs
ARTD–Art Design	ISYE–Industrial Engineering
ARTE–Art Education	JOUR–Journalism
ARTH–Art History	KNDN–Physical Education Dance
ARTS–Art 2-D and 3-D Studio	KNPE–Physical Education
BADM–Business Administration	LEBM–School Business Management
BIOS–Biological Sciences	LEEA–Educational Administration
BKST–Black Studies	LESM–Sport Management
CAHA–Adult and Higher Education	LGBT–Lesbian, Gay, Bisexual, and Transgender Studies
CAHC–Counseling	LTIC–Bilingual/ESL
CAHE–Adult and Higher Education	LTLA–Language Arts
CHEM–Chemistry	LTRE–Reading
CLCE–Community Leadership and Civic Engagement	MATH–Mathematical Sciences
COMD–Communicative Disorders	MEE–Mechanical Engineering
COMS–Communication Studies	MET–Meteorology
CSCI–Computer Science	MGMT–Management
ECON–Economics	MILS–Military Science
ELE–Electrical Engineering	MKTG–Marketing
ENGL–English	MUED–Music Education
ENVS–Environmental Studies	MUHL–Music History and Literature
EPFE–Foundations of Education	MUSC–Music
EPS–Educational Psychology	MUSE–Music Ensembles
ETR–Research and Assessment	MUSP–Music Performance
ETT–Instructional Technology	MUTC–Music Theory and Composition
FCNS–Family, Consumer, and Nutrition Sciences	NURS–Nursing
FINA–Finance	OMIS–Operations Management and Information Systems
FLAL–Applied Linguistics and General	PHHE–Public Health and Health Education
FLAR–Arabic	PHIL–Philosophy
FLBU–Burmese	PHYS–Physics
FLCH–Chinese	POLS–Political Science
FLCL–Classical Languages	PSPA–Public Administration
FLFR–French	PSYC–Psychology
FLGE–German	SEEC–Early Childhood Education
FLIN–Indonesian	SESE–Special Education
FLIS–Foreign Language Independent Study	SEVI–Visual Disabilities
FLIT–Italian	SOCI–Sociology
FLJA–Japanese	STAT–Statistics
FLKN–Korean	TECH–Technology
FLMT–Foreign Language Methods	THEA–Theatre Arts
FLPL–Polish	TH-D–Dance Performance
FLPO–Portuguese	TLCI–Curriculum and Instruction
FLPT–Foreign Language Student Teaching	TLEE–Elementary Education
FLRU–Russian	UBUS–Interdisciplinary Business
FLSP–Spanish	UEDU–Interdisciplinary Education
FLST–Special Topics	UEET–Interdisciplinary Engineering and Engineering Technology
FLTA–Tagalog	UHHS–Interdisciplinary Health and Human Sciences
FLTH–Thai	UNIV–University-Wide Interdisciplinary
FLTR–Foreign Language Translation	WOMS–Women's Studies
	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: 500-799

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.

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.)

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.

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 second week 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 multiemphasis 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 all educator licensure 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.

GPA hours: The number of semester hours for which grades of A, A-, B+, B, B-, C+, D, or F are recorded.

Grade point: The numerical value given to letter grades. See Grading System.

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.

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.

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.

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, whereas 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 supports student career success through academic advising, personal counseling, and career and placement counseling. As a residential university, NIU provides cultural, athletic, and other cocurricular activities within an atmosphere designed to enrich the undergraduate learning experience.

NIU is located in DeKalb, Illinois, a community of 40,000 people, 65 miles west of Chicago. Thus, NIU offers the ease in daily living associated with a medium-sized town while at the same time providing the cultural advantages associated with access to a major urban center. In addition, many of NIU's programs are enhanced by the university's proximity to the major industries and large alumni base in the Chicago and suburban area; these provide opportunities for internships and clinical experience. 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 vision of Northern Illinois University is to be the premier student-centered, research-focused public university in the Midwest, contributing to the advancement of knowledge for the benefit of the people of the region, the state, the nation, and the world.

With this vision, the mission of the University is to promote excellence and engagement in teaching and learning, research and scholarship, creativity and artistry, and outreach and service.

In pursuing our vision and fulfilling our mission, the University values:

- A community of diverse people, ideas, services, and scholarly endeavors in a climate of respect for the intrinsic dignity of each individual;
- Access for a broad spectrum of students to high quality undergraduate, graduate, and professional programs that prepare them to be lifelong learners and productive, socially conscious citizens;
- Engaged teaching and learning that evolves from the synergy of research, artistry, and service;
- Research and artistry in creating, transmitting, expanding, and applying knowledge;
- Student success supported through academic and co-curricular programming and activities;
- The application of current technology in enhancing and broadening all institutional endeavors;
- A system of shared governance that incorporates input from faculty, staff, and students in decision- and policy-making;
- Commitment to a public purpose addressing regional, state, national, and global challenges and opportunities.

Recognizing that students will need to learn throughout their lives, the university provides them with the opportunity to become more competent in critical thinking, creativity, and communication.

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, 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. NIU is included in the Research Universities–High Activity category of the Carnegie Foundation for the Advancement of Teaching and has achieved the Community Engagement Classifications for Outreach and Partnerships and for Student Engagement. The university is a member of the Association of Public and Land-Grant Universities.

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, American Association of State Colleges and Universities, Council of Graduate Schools, and Universities Research Association.

The university is also fully accredited by the Council for Accreditation of Education Preparation (CAEP) to offer teacher education programs and offers several educator licensure programs that are approved by the Illinois State Board of Education.

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 B.S. major in athletic training is accredited by the Commission on Accreditation of Athletic Education Training.

In the College of Engineering and Engineering Technology, the undergraduate programs in electrical engineering, industrial and systems 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 and manufacturing engineering technology are accredited by the Technology Accreditation Commission of ABET, and the emphasis in industrial management technology is accredited by the Association of Technology, Management, and Applied Engineering.

In the College of Health and Human Sciences, the School of Allied Health and Communicative Disorders offers a medical laboratory sciences program that is accredited by the National Accrediting Agency for Clinical Laboratory Sciences and a physical therapy program that is accredited by the Commission on Accreditation in Physical Therapy Education. The Au.D. and M.A. with a specialization in speech-language pathology are accredited by the American Speech-Language-Hearing Association and

a specialization in rehabilitation counseling 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 Accreditation Council for Education of Nutrition and Dietetics. The undergraduate and graduate programs in nursing in the School of Nursing and Health Studies are accredited by the Commission on Collegiate Nursing Education and the master of public health program is accredited by the Council on Education for Public Health.

In the College of Liberal Arts and Sciences, the Master of Public Administration degree offered by the Department of Public Administration is accredited by the National Association of Schools of Public Affairs and Administration, and the clinical psychology and school psychology areas within the Doctor of Philosophy degree program in the Department of Psychology are 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 756-acre 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, 64-building campus. The first building, Altgeld Hall, originally known as "the Castle on the Hill," still stands and has 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 activities for K-12 students studying various aspects of environmental education. 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 log on to www.niu.edu/regional/index.shtml.

University 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. All offices are closed on legal holidays.

Visitors may obtain information at the Altgeld Welcome and Information Center. 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, or schedule a Saturday visit from 10:30 a.m.–12:30 p.m. at Cole Hall.

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 freshman-level 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, Visual and Performing Arts, and the Office of the Provost. 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; these are 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.

The NIU baccalaureate degree experience enables graduates to think critically, create, and communicate by participating in an engaged learning environment to prepare for success in a diverse, global society. This learning environment emphasizes the importance of context. Graduates will be prepared to understand the impact of history on modern society, the relationship between our society and others around the globe, and the unity and diversity of the American experience. Students will be exposed to a broad range of experiences and knowledge through the study of natural science, social science, the humanities, and the arts. Students will develop their knowledge, capacities, and abilities through an intentionally developed curriculum that integrates general education, the students' majors, and opportunities outside the classroom. NIU graduates will become life-long learners who are empowered, informed, and responsible citizens.

Goal definitions—The “Three Cs”

Critical thinking—involves literacy, reflectivity, and understanding how to gather and make sense of various forms of information before accepting or formulating an opinion or conclusion.

Creativity—uses a combination of imagination, intellect, insight, and emotion to solve problems and transform existing ideas, images, or techniques in innovative and original ways.

Communication—includes the mastery of basic skills, such as language, technology, and collaboration.

Baccalaureate learning outcomes

The baccalaureate learning outcomes include:

- Integrate knowledge of global interconnections and interdependencies
- Exhibit intercultural competencies with people of diverse backgrounds and perspectives
- Analyze issues that interconnect human life and the natural world
- Demonstrate critical, creative, and independent thought
- Communicate clearly and effectively
- Collaborate with others to achieve specific goals
- Use and combine appropriate quantitative and qualitative reasoning skills to address questions and solve problems

- Synthesize knowledge and skills relevant to one's major or particular fields of study and apply them creatively to develop innovative outcomes

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 of the print catalog.

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

College of Business

Accountancy (B.S.)
Business Administration (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.)
Special and Early Education (B.S.)

College of Engineering and Engineering Technology

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

College of Health and Human Sciences

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

College of Liberal Arts and Sciences

School of Public and Global Affairs
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.)
Environmental Studies (B.A./B.S.)
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.)

Non-Governmental Organization Leadership and Development (CLCE, B.A./B.S.)
 Philosophy (B.A.)
 Physics (B.S.)
 Political Science (B.A./B.S.)
 Psychology (B.A./B.S.)
 Public Administration
 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 Health and Human Sciences
 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
 Literacy and Elementary Education
 Special and Early Education

College of Health and Human Sciences

Nursing and Health Studies

College of Visual and Performing Arts

Art and Design

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.
 Athletic training—B.S.
 Biological sciences—B.S.
 Business administration—B.S.
 Chemistry—B.S.
 Communication studies—B.A. and B.S.
 Communicative disorders—B.S.
 Community leadership and civic engagement—B.A. and 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.
 Environmental studies—B.A. and B.S.
 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 and systems 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.
 Medical laboratory sciences—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.
 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 an enriched educational experience for students of high academic promise and achievement who have a commitment to excellence. The program is open to students in all undergraduate colleges and provides its students with uniquely designed and specially taught courses; access to award-winning professors; a low student-to-faculty ratio; unique study abroad programs; Honors-only research programs, specialized advising; a living-learning community; peer and alumni mentoring; specialized internships; and Honors-only scholarships, tuition waivers, and awards.

University Honors courses differ from other courses in that they encourage more open exchange between students and professors, are designed to engage students in practical and enhanced learning opportunities, and provide direct access to the best faculty both inside and outside the classroom. For the Capstone Project, students are encouraged to pursue a subject of their choosing in depth and to develop their interests through independent, yet guided, research, study, or artistry. University Honors sections are normally available in all general education areas, as elective seminars, and in virtually all majors.

Since all University Honors credit applies toward graduation requirements, a University 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.

Academic Program

The program is divided into two parts. 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 of 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 a University Honors Seminar and an Honors Capstone independent study project completed during the senior year. Normally, the University Honors Seminar must be taken outside of students' majors. However, students who have completed lower-division honors at NIU and are part of a departmental or college honors program may, with permission of the program, take their seminars within their majors.

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. Credit earned in departmental honors programs may be included within the 27-hours requirement for University Honors. Students may earn honors credit in general education, elective, and major courses with a grade of A, A-, B+, B, B-, C+ or C. However, the student must earn an A, A-, B+, B 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 their 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 the University Honors Program is based on a minimum composite ACT score of 27 or SAT score of 1200 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 provisional status as space permits. Students at NIU or who transfer from other institutions as freshmen or sophomores may pursue Lower Division Honors if they have a cumulative GPA of 3.20 or better (on a 4.00 scale). Upper Division Honors may be pursued by transfer and native students who have attained junior status and maintain a minimum cumulative GPA of 3.20 (on a 4.00 scale).

Honors Transfer Credit

Those students who have previously completed 15 hours of honors courses may have these courses counted toward the completion of Lower Division Honors and thus earn full University Honors. To be credited with having completed Lower Division Honors elsewhere, the following must apply.

The honors course work must have been completed in an established Honors Program that is a member of the National Collegiate Honors Council or Honors Council of the Illinois Region.

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.

However, no transfer credit will be accepted toward Upper Division Honors and a student may not earn NIU Upper Division Honors using transfer credit.

Degrees with Distinction

Students who complete only Lower Division Honors will have this designated on the official transcript.

Students who complete only Upper Division Honors will have this designated on the official transcript and on the diploma.

Students who complete Lower and Upper Division Honors 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

The University Honors Program provides all of its students with special curricular, cocurricular, and extracurricular programming.

All first-year and new transfer students are required to attend a two-day, overnight orientation program held at NIU's Lorado Taft Field Campus in August where they are introduced to the program's full complement of offerings, work with the University Honors Fellows and Peer Mentors, and learn how to be successful at NIU.

Other services include priority registration for all courses, extended borrowing privileges for all library materials, dedicated regular and special advising and help in designing an academic program, the largest living-learning community in Honors House located in New Residence Hall Complex, internship and externship programs, and a variety of extracurricular academic, professional development, community service, and social events, both on and off campus. University Honors students also have opportunities to participate in special honors seminars on leadership, ethics, and microfinance; to study abroad in Argentina, Canada, China, Ghana, and The Netherlands; to participate in peer leadership positions; to be named as University Honors Research Scholars; to receive special research and travel grants; and to attend state, regional, and national conferences.

Further information about the University Honors Program may be obtained by visiting the University Honors Center in the Campus Life Building (CLB) 110, calling 815-753-0694, sending an e-mail to honors@niu.edu, or visiting the website at www.honors.niu.edu/honors.

Assessment at Northern Illinois University

Northern Illinois University engages in assessment processes to answer important questions about the quality of students' baccalaureate experiences. Assessment is one of the ways the university measures the extent to which it fulfills its educational mission, and information gained from assessment processes helps the university improve courses, degree programs, and academic and student support services. Additionally, assessment activities provide information that is required at the state and national levels for certification and accreditation purposes. Most importantly, assessment processes tell us how well the university is meeting students' needs.

Many assessment activities at NIU occur as a part of instruction within the degree program. Other assessment activities, including testing, surveys and projects, occur with the goal of measuring

students' abilities by evaluating performance at selected points in time. As students progress through degree programs, they will be expected to participate in assessment measures, which they should complete to the best of their abilities. Students' performances on these measures reflect on the quality of the university and its undergraduate programs. Although summary data may be published or presented at conferences, student performance data are aggregated; no individual student information is reported.

Questions regarding assessment should be directed to the Office of Assessment Services, 815-753-8659, Adams Hall, Room B20.

Educator Licensure Programs

See "Educator Licensure 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

Northern Illinois University recognizes that the principles of cultural diversity and global awareness are essential to learning and striving for excellence in the higher educational environment. In recognition of this commitment, NIU expressly prohibits the consideration or use of race, color, national origin, sex, religion, age, physical or mental disability, marital status, veteran status, sexual orientation, political affiliation, status as a victim or perceived victim of domestic or sexual violence or any other factor unrelated to professional qualifications as a basis for any employment decision, in its admission procedures, and in access to its programs. Factors such as academic record, test scores, special talents or ability, personal character, and references may be taken into consideration 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
Postbaccalaureate Students

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 heading.

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 Computer Science
Department of Kinesiology and Physical Education (athletic training)
Department of Literacy and Elementary Education (elementary education)
Department of Sociology
Department of Special and Early Education (early childhood studies)
Department of Technology (nuclear engineering technology emphasis)

School of Allied Health and Communicative Disorders (medical laboratory sciences)
School of Art and Design (art and design 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 and Health Studies
School of Theatre and Dance (B.F.A. emphasis in acting; B.F.A. emphasis in design and technology)

Some programs have limited retention. See individual colleges and departments for specific requirements.

Application Procedure

Application Materials

Correspondence about undergraduate admission to the university should be addressed to the Office of Undergraduate Admissions, Northern Illinois University, 1425 W. Lincoln Highway, 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

Students are encouraged to apply as soon as possible. Students can apply after the following dates.

<i>Term</i>	<i>Apply after</i>
Spring 2015.....	May 1, 2014
Summer 2015	September 1, 2014
Fall 2015	September 1, 2014

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.

<i>Term</i>	<i>Deadline</i>
Spring 2015.....	December 1, 2014
Summer 2015	May 15, 2015
Fall 2015	August 1, 2015

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.

<i>Term</i>	<i>Deadline</i>
Spring 2015.....	November 15, 2014
Summer 2015	May 1, 2015
Fall 2015	July 15, 2015

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 company. 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 postbaccalaureates or of transfer students with 24 or more transferable semester hours.

Admission to Major Programs

Applicants declare their major on the application for university admission. The declared 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, 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 (110-ILCS 20) and university policy require that all students born on or after January 1, 1957, who are assessed on campus fees, 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.

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 late processing fee. A registration encumbrance will also be placed on the records of students who are not in compliance. You will be notified at your NIU e-mail account if any additional information is required.

Immunization information may be obtained from the Health Services web page at www.niu.edu/healthservices/immunizations or by calling 815-753-9585.

Meningococcal Meningitis

The Center for Disease Control's Advisory Committee on Immunization Practices (ACIP) recommends that college freshman living in residence halls be immunized against meningococcal disease. The ACIP recommendation further states that other college students under 25 years of age who wish to reduce their risk for the disease may choose to be vaccinated.

Meningitis is an inflammation of the linings of the brain and spinal cord that is caused either by viruses or bacteria. Viral meningitis is generally less severe and resolves without specific treatment. Bacterial meningitis, especially meningococcal meningitis, is more serious and can result in permanent neurologic damage or death.

Meningococcal meningitis commonly begins with high fever, headache, and stiff neck that develop over a period of several hours to two days. Other symptoms may include nausea, vomiting, confusion, drowsiness and discomfort looking at bright lights. Meningococcal meningitis is spread through exchange of oral and respiratory secretions (i.e., coughing, kissing, and sharing eating utensils), not through casual contact. Individuals who live in the same household or have direct contact with an infected person's oral secretions are at an increased risk of acquiring the infection.

Two vaccines are available that protect against four of the five strains (or types) of the bacterium that cause meningococcal disease. While both vaccines provide immunity for a number of years to approximately 90% of those who are vaccinated, neither medication confers lifelong immunity to meningococcal meningitis.

Health Services provides meningococcal vaccinations for NIU students on request. There is a charge for this vaccination. For more information, please contact Preventive Medicine at 815-753-9759.

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 three 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 have attempted transferable college-level credit at the time of application, and are entering the University in the academic year following their graduation from secondary school or its equivalent are evaluated using freshman admission requirements.

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 believe 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.

<i>Term</i>	<i>Petition by</i>
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 2015

Individuals who submit complete applications including all transcripts and test score information by November 1, 2014, 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, 2014.

Individuals who submit complete applications after November 1, 2014, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available.

Summer Session 2015 and Fall Semester 2015

Individuals who submit complete applications including all transcripts and test score information by November 15, 2014, 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, 2015.

Individuals who submit complete applications after November 15, 2014, 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, 2015, 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.

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., A.S., or A.A.T. degree in early childhood, secondary math, or special education will be admitted to NIU as long as space is available. 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 (A.A.T.) 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, 815-753-0446

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 educator licensure should carefully read the section “Educator Licensure 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.

Schedule for Application Review

Spring Semester 2015

Individuals who submit complete applications including all official transcripts and required documents by November 1, 2014, 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, 2014.

Individuals who submit complete applications after November 1, 2014, and satisfy minimum admissions criteria are considered for admission on a competitive basis as long as space is available.

Summer Session 2015 and Fall Semester 2015

The schedule on which application will be reviewed provides for competitive admission on a space-available basis. Early application is encouraged.

International Students

International undergraduate students are asked to submit the following materials for admission to NIU: Official school records from all schools attended (with official English translation), all official test scores (including TOEFL, IELTS, SAT, and/or ACT), admissions application, and an application fee. Note: the ACT or SAT is not required for international freshmen applicants from foreign high schools. The ACT or SAT is required for international freshmen applicants from U.S. high schools. F-1 and J-1 students must also submit proof of financial ability in order to receive their immigration documents.

Fall semester deadlines are May 1 for students living outside the United States and June 15 for students living in the United States. Spring semester deadlines are October 1 for students living outside the United States and November 15 for students living in the United States.

Postbaccalaureate Students

Postbaccalaureate 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 postbaccalaureate applicant must submit official transcripts from all previously attended institutions, other than NIU. All credit will be evaluated from the perspective of the new major. Postbaccalaureate applicants are subject to the review procedures applicable to limited admission and retention programs. See “Limited Admissions Requirements” and individual college programs.

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

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

An individual with a baccalaureate degree who wishes to take 500-, 600-, or 700-level graduate courses should apply to the Graduate School for admission as a graduate student or for student-at-large status. (See the *Graduate Catalog*.)

Whether postbaccalaureate 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 postbaccalaureate 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 the CHANCE program, 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 the CHANCE Program 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. The university annually looks at demographic and academic performance data to identify schools which are targeted for inclusion in the program. Please visit the CHANCE Program website for more information and listing of target schools (www.chance.niu.edu).

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 CHANCE. 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 Educational Services and Programs, which includes CHANCE, ACCESS, Student Support Services, and related university services as a means to ensure success at NIU.

Freshmen admission to NIU through CHANCE 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 by March 1.
- Submit application fee.
- Submit an official high school transcript.
- Have official ACT or SAT scores sent to NIU.
- Write and submit a personal statement.
- Meet with a CHANCE counselor for a personal interview.
- Participate in a residential 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.

Visiting Students

- A student who has not previously enrolled in NIU as an undergraduate degree seeking student may apply for temporary admission and take courses as a visiting student. Visiting students are limited to 15 semester hours; those who wish to enroll in additional hours must reapply through the Office of Admissions. Students enrolled in International Studies programs are not subject to the one-term limitation.
- Visiting students are ineligible for scholarships and federal and state financial aid.
- Students who wish to attend NIU as visiting students must submit an undergraduate application and application fee. Although transcripts are not required for admission as a visiting student, enrollment in specific courses may require the submission of official transcripts to the college advising office to determine if prerequisite requirements for the course have been met. Secondary students may apply as a visiting student and 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.
- Visiting students are 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.).
- The benefits that apply to the A.A. or A.S. degree or approved A.A.T. degree as described under the section titled “Illinois Public Community College Graduates” are not assured to students who have previously attended NIU as a visiting student. These students must petition for these benefits in a letter accompanying the application for admission to a degree program.
- Students who have been denied admission as a degree seeking student are not eligible for admission as a visiting student for the identical academic semester or summer session.

Students who have previously attended NIU as a degree seeking student must apply according to the guidelines listed in the “Readmission of Former NIU Students” section of this catalog. Students who have been academically dismissed from NIU are not eligible to apply as visiting students.

Changing to Degree Status

- Visiting 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 of the undergraduate catalog.
- 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.

Visiting 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

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. Reentering students who left NIU on academic probation who have no college affiliation must make their appointment with the Academic Advising Center prior to being cleared to register for classes.
- Students who apply for readmission after an absence of ten years or longer* may request consideration for the benefits of a returning student special readmission 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 having previously been dismissed or on academic probation will return to NIU on final academic probation.

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

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.

Applied Manufacturing Technology Emphasis (Department of Technology)

The emphasis in applied manufacturing technology in the Department of Technology is limited to transfer students with an Associate of Applied Science degree with a major in a recognized technical area. For more specific information regarding admission to this emphasis contact the Department of Technology.

Art and Design Education (School of Art and Design)

The School of Art and Design limits the number of students admitted to the major in art (B.S.Ed), track 1, educator licensure. 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 educator licensure.

Athletic Training Major (Department of Kinesiology and Physical Education)

The Department of Kinesiology and Physical Education limits the number of students admitted to the B.S. in athletic training. To graduate in a timely manner, students are encouraged to apply by February 15 of freshman year. 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 department's main office.

Students may begin the major in athletic training only in the fall semester.

Application to the athletic training education program is required and the application packet includes:

- Completed pre-admission courses below with a C or better
- Provide a transcript from all post-secondary institutions attended
- Have a minimum overall GPA of 2.50 in all NIU and transfer courses
- One or more essays
- Documentation with a certified athletic trainer's signature of observation or experience in an athletic training setting within the last 10 months prior to application
- Two letters of recommendation with at least one, but preferably both, from a certified athletic trainer, from people who are familiar with and/or have supervised the applicant's professional work related or volunteer experiences.

This information will be used to determine which students are invited for an interview. The interview and above information will be used to determine which students are admitted into the athletic training major.

NIU students should apply for admission to the athletic training major through the Department's main office. To be considered for fall admission, the completed application must be submitted by February 15th of the previous spring semester. The Athletic Training Admissions Committee will review all completed applications and will select students to be interviewed based on the composite of all components of the application. Notification of admission into the major will be made by March 15th. Late applications will be considered providing there is adequate enrollment space available in the program.

Pre-Admission Courses:

- *CHEM 110 - Chemistry (3),
OR *completion of one of the university's mathematics core competency courses (MATH 201 may not be used to fulfill this requirement)
- *ENGL 103 - Rhetoric and Composition I (3),
OR *ENGL 104 - Rhetoric and Composition II (3),
OR *ENGL 105 - Rhetoric and Composition (3), if placed in ENGL 105
- *PSYC 102 - Introduction to Psychology (3)

Once admitted to the athletic training major, prior to the fall semester, students are required to:

- Provide evidence of current first aid from a nationally recognized organization (e.g., American Red Cross)
- Sign the Contract of Understanding for Athletic Training (original signature)
- Physical exam including immunization records screening

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

Continued enrollment in the emphasis in athletic training is contingent on maintenance of a minimum cumulative GPA of 2.50 on a 4.00 scale, and completion of all required athletic training courses with a grade of C or better.

The Northern Illinois University athletic training emphasis requires students to gain athletic training clinical experience at local community high schools, under the supervision of an approved clinical instructor and Illinois licensed athletic trainer.

Illinois law requires Illinois school boards to conduct a criminal background check. For specifics regarding criminal background check, see educator licensure requirements. An adverse decision for admittance to the program may be appealed through the athletic training emphasis.

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

Aviation Management Technology Emphasis (Department of Technology)

The emphasis in aviation management technology in the Department of Technology is limited to students who possess an A.A.S. degree in aviation maintenance technology from a community college. Entry into this program also requires that the students complete their F.A.A. Airframe and Power Plant certificates. For more specific information regarding admission to this emphasis contact the Department of Technology.

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

All applicants must be practicing health or human sciences professionals who hold a current professional credential, certification, or license in a health or human sciences field and have completed an associates degree program or equivalent number of credits. The professional credential, certificate or license must be in the field in which the applicant is working or attempting to work. Contact the College of Health and Human Sciences advising office for application forms.

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), and *MATH 211, Calculus for Business and Social Science (3),
OR *MATH 206, Introductory Discrete Mathematics (3), and
*MATH 229, Calculus I (4),
OR *MATH 229 and MATH 230, Calculus I and II (8)
- 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 must seek departmental advisement at orientation or just prior to the beginning of their first semester on campus. If they have completed all declaration requirements prior to admission to the university, they will declare their major with the department during the third through the sixth weeks (second through fourth weeks of the summer term) of their first semester on campus. In all other cases, the department will advise students when to declare, and they will be given access to appropriate computer science 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 Special and Early Education/School of Family, Consumer, and Nutrition Sciences)

The Department of Special and Early Education 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 licensure offered by the School of Family, Consumer, and Nutrition Sciences or the emphasis in 04 licensure with preschool special education approval offered by the Department of Special and Early Education. Students should seek advisement early in their academic career for assistance with making this choice. Requirements for each emphasis in 04 licensure 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 2.50 including transfer credit, successfully completed the ILTS Test of Academic Proficiency (TAP), provided written proof of a fingerprint-based criminal background check in compliance with NIU policy, 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)
- 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. Students must provide current verification of TB test prior to the first clinical course.

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 licensure (12-15)

- *BIOS 103, General Biology (3),
OR *BIOS 109, Human Biology (3)
- *ETT 229, Computers in Education (3), or pass the ETRA Skills Competency Examination (0)
- FCNS 284, Introduction to Family Relationships (3)
- SESE 240, Introduction to Special Education (3)
- *STAT 208, Basic Statistics (3)

Additional prerequisites for emphasis in 04 licensure with preschool special education approval (15-20)

- *ETT 229, Computers in Education (3), or pass the ETRA Skills Competency Examination (0)
- FCNS 284, Introduction to Family Relationships (3)
- SESE 240, Introduction to Special Education (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)
- One general education physical science course (3-4)
- Either the biology or physical science course must include a laboratory

Applicants who have earned an A.A.T. in Early Childhood are considered to have met all prerequisites listed above for either emphasis.

Admission to teacher education takes place upon passing the ILTS Test of Academic Proficiency (TAP), having a cumulative GPA of at least 2.50, 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 2.50 or higher and having a grade of C or better in all required courses completed in subsequent semesters. Students must provide current verification of TB test prior to the first clinical course.

Information regarding these pre-admission criteria, including test dates for the ILTS Test of Academic Proficiency (TAP), can be obtained from the Department of Special and Early Education 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.

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 licensure with preschool special education approval should apply in the Department of Special and Early Education and students seeking 04 licensure 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 Literacy and Elementary Education)

The Department of Literacy and Elementary Education 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 postbaccalaureate students compete with other postbaccalaureate 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 ILTS Test of Academic Proficiency (TAP) 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 ILTS Test of Academic Proficiency (TAP), 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 end of the semester in which they apply.

- ARTE 383, Teaching Art in Elementary Schools (3),
OR MUED 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)
- SESE 240, Introduction to Special Education (3)
- TL EE 282, Educational Participation in Clinical Experiences: Elementary Education (1)
- One laboratory science course (4)

Information regarding these pre-admission criteria, including test dates for the ILTS Test of Academic Proficiency (TAP), 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 Literacy and Elementary Education. 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 Literacy and Elementary Education 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)

- FCNS 230, Child Development (3),
OR FCNS 280, Human Development, the Family, and Society (3),
OR *SOCI 170, Introduction to Sociology (3)

Additional prerequisite for emphasis 2, family social services (3)

- FCNS 280, Human Development, the Family, and Society (3)
OR *SOCI 170, Introduction to Sociology (3)

Additional prerequisite for emphasis 3, child development (3)

- FCNS 230, Child Development (3),
OR FCNS 280, Human Development, the Family, and Society (3)

To be considered for admission into the family and child studies major, students must have been accepted to NIU and have confirmed their intent to enroll at NIU. Students must also apply separately to the family and child studies major. Students may choose a first and second choice from the following emphases: Emphasis 1: Family and Individual Development, Emphasis 2: Family Social Services, or Emphasis 3: Child Development. Depending on the semester the student chooses to apply, an application must be turned in by the following deadlines:

<i>Term</i>	<i>Applications complete by</i>
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 current, transfer, or reentering students. Current NIU students should apply directly to the School for admission into a family and child studies emphasis.

Transfer and reentering students' cumulative GPA from all schools attended will be calculated from those classes that will count toward the baccalaureate degree. For students who have earned at least 15 credits at NIU that apply to either their major, minor, or general education requirements, the NIU GPA will be reviewed.

Students indicating an interest in the family and child studies program on the application for admission to the university will be admitted as pre-FCNS majors. For admission to the School as a major, students may download from the FCNS website an application to their chosen emphasis approximately one month prior to each deadline. Transferring or reentering students should seek advisement through the College of Health & Human Sciences office.

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

Medical Laboratory Sciences Major (School of Allied Health and Communicative Disorders)

The School of Allied Health and Communicative Disorders limits the total number of students admitted to the medical 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 medical laboratory sciences major, students must be admitted to NIU and have completed or be in the process of completing a minimum of 11 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. Letters of recommendation, personal goal statement, and additional considerations as indicated in the application letter. Transfer students are encouraged to contact a program adviser before enrolling to determine whether prior course work satisfies prerequisites. For applicants with prerequisite courses in progress, 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.

- BIOS 208, Fundamentals of Biology I (3), and BIOS 210, Fundamentals of Biology I Laboratory (1)
- BIOS 209, 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 210, General Chemistry I (3), and *CHEM 212, General Chemistry Laboratory (1)
- *CHEM 211, 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)
- *STAT 208, Basic Statistics (3)

All students who meet the above requirements will be required to submit a completed medical laboratory sciences program application;

provide a brief written goal statement and explanation of why the medical laboratory sciences major was chosen; and

provide two letters of recommendation from science instructors or healthcare supervisors who are familiar with the applicant's classroom and/or laboratory abilities.

Students interested in the MLS major may access application materials on the website: <http://www.chhs.niu.edu/cls/>. Applicants must submit the required materials by February 1. Notification of medical laboratory sciences program admission status will be made by March. Additional applications may be considered before May 1 based upon space availability with notification made by June 1. Students who are admitted to the MLS program and choose to attend NIU are required to have a Hepatitis B titer by blood test prior to beginning the program.

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 and Health Studies)

The School of Nursing and Health Studies 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 and Health Studies standards. (Students with an ACT reading test score of 24 or higher and postbaccalaureates 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. Freshmen, current NIU, 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 end of the spring semester. Admitted students are required to obtain school advisement at orientation.

All applicants must successfully achieve a reading comprehension score in compliance with the nursing program standards: an ACT reading score of 24 or higher or a passing score on the Accuplacer Exam. Arrangements for taking the Accuplacer

Reading Examination may be made through the NIU Office of Testing Services. Applicants with a baccalaureate or higher degree and registered nurse applicants 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. Current NIU students should submit all application materials to the nursing program by February 15.

Any applicant who has had an extended absence from postsecondary course work or who is attempting a second baccalaureate degree may petition the nursing program 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 and Health Studies section of this catalog.

All students who are admitted to the nursing program are admitted provisionally until they have provided proof of meeting the clinical requirements outlined in the Undergraduate Nursing Student Handbook. Full admission to the nursing program is required to enroll in nursing courses. All nursing majors are required to submit proof of having met clinical requirements when requested and must maintain clinical requirements for continued enrollment in the nursing major. The Undergraduate Nursing Student Handbook contains additional policies related to admission and progression through the nursing program.

If a previously admitted NIU nursing student is readmitted to the nursing program, any NIU nursing courses completed five years prior to readmission must be repeated. Nursing courses completed more than five years prior to admission will need to be retaken to meet the major requirements.

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. An established GPA at NIU may be a factor considered in admission decisions. 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 have submitted all application materials 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 nursing program. Highly qualified freshman applicants who complete the admission processes during the fall semester may be offered early admission to the nursing program.

Current NIU Students

Applicants with fewer than 24 post-secondary semester hours completed by the application deadline will be considered as freshmen (see previous section). Current NIU student applicants are defined as those who have earned 24 or more post secondary semester hours and must have an established NIU GPA with a minimum of 12 hours that apply to the student's major, minor, or general education requirements. Current NIU students will be reviewed as a separate applicant pool.

By the February 15 application deadline, current NIU students must submit an on-campus application. The applicant must satisfy the reading comprehension requirement and complete a minimum of five (or preferably more) 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 and the number of prerequisites completed.

Additional current NIU student applications may be considered based on space availability for fall and spring semesters.

Transfer Students

Applicants with fewer than 24 post-secondary semester hours completed by the application deadline will be considered as freshmen (see previous section). Transfer and re-entering applicants to the university with 24 or more post-secondary semester hours, who are not registered nurses, will be considered transfer applicants. Transfer applicants are reviewed as a separate applicant pool.

By the February 15 application deadline, transfer applicants must have submitted all application materials to NIU. Transfer applicants must have all current transcripts at NIU, satisfy the reading comprehension requirement, and complete a minimum of five (or preferably more) 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 and the number of prerequisites completed. Additional transfer applications may be considered based on space availability for fall and spring semesters.

Prerequisite Courses Used in Evaluating Applicants

- *BIOS 103, General Biology (3) and *BIOS 105, General Biology Laboratory (1)
- BIOS 213, Introduction to 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 210, 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)

The following prerequisite courses must be completed within seven years of admission to the nursing program: BIOS 213 or BIOS 313; and BIOS 357.

Transfer Students from Other Nursing Programs

A student transferring from another nursing program to NIU's baccalaureate nursing program is required to request an official transcript from the program as well as 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. The student must also and request a letter of reference from a faculty member teaching in the student's most recently completed semester. An admissions decision will be based on review of these documents. These materials are to be mailed directly to the nursing program from the originating institution.

Registered Nurses

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

Admission requirements are

- 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 nursing program;

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 nursing program. Applicants new to the university should submit an application through the Office of Admissions and continuing NIU students should submit an application to the nursing program.

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)
- SOCI 280, Foundations of 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)

Visual Communication Area of Study (School of Art and Design)

Admission to the Visual Communication program is limited. The total number of students accepted will be determined by available resources on a year by year basis. Successful candidates must meet the following conditions: i) be admitted to the university, ii) have a minimum overall GPA of 2.50 on a 4.00 scale for all courses including transfer courses, iii) interview with the Visual Communication faculty selection committee, iv) submit a portfolio of work that meets the admission criteria for the program. The interview and portfolio will be used to determine which students are admitted. Visual Communication applicants should check the School of Art website or contact the School of Art Main Office, Art Building 216 for detailed information.

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. See individual colleges and departments for specific requirements.

* Available for general education credit.

² Forms for goal and expectancy statements and letters of recommendation are obtained from the School of Nursing and Health Studies.

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 an educator licensure 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)

The four broad learning goals of the general education program are:

- a. Students develop habits of writing, speaking, and reasoning necessary for continued learning.
 - i. Students communicate clearly in written English, demonstrating their ability to comprehend, analyze, and interrogate critically.
 - ii. Students communicate in a manner that unites theory, criticism, and practice in speaking and writing.
 - iii. Students perform basic computations, display facility with use of formal and quantitative reasoning analysis and problem solving, and interpret mathematical models and statistical information.
 - iv. Students are able to access and use various information resources.

b. Students develop an ability to use modes of inquiry across a variety of disciplines in the humanities and the arts, the physical sciences and mathematics, and the social sciences.

i. Students demonstrate knowledge of the historical and prehistorical development of societies and cultures, and of the relations of such development to the present.

ii. Students demonstrate an ability to articulate the significance of the arts and an ability to apply analytical and interpretive skills to the critical examination of the social/cultural values and aesthetic qualities found in the arts and popular culture(s).

iii. Students demonstrate knowledge of the cultural traditions and philosophical ideas that have shaped societies, civilizations, and human self-conceptions.

iv. Students demonstrate an ability to use scientific methods and theories to understand the phenomena studied in the natural and social sciences.

c. Students develop an understanding of the interrelatedness of various disciplines by integrating knowledge from several disciplines and applying that knowledge to an understanding of important problems and issues.

d. Students develop social responsibility and preparation for citizenship through global awareness, environmental sensitivity, and an appreciation of cultural diversity.

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)

NOTE: For students who have earned a D in either ENGL 103 or 104, or both, equivalent courses in which the student earned a grade of C or better at institutions participating in the Illinois Articulation Initiative will be accepted to satisfy the English core competency requirement, but do not earn transfer credit. Equivalent courses in which the student earned a grade of C or better at other institutions may be accepted to satisfy the English core competency requirement, but do not earn transfer credit.

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.

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

ENGL105. 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 or a score of 30 or higher on the ACT combined English/Writing test.

ISYE 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.

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. Students may receive credit for both MATH 211 and MATH 229, but only one of them will count toward the minimum number of hours required for graduation. 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. Students may receive credit for both MATH 211 and MATH 229, but only one of them will count toward the minimum number of hours required for graduation. PRQ: MATH 155 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination. MATH 229 may count toward both the mathematics core competency requirement and the sciences and mathematics area requirement in distributive studies if a grade of C or better is earned. If a grade of D is earned, the course will count only toward the sciences and mathematics area requirement.

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.

STAT 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.

STAT 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.

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.

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)****Courses from the College of Education**

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. PRQ: Sophomore standing.

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.

Courses from the College of Liberal Arts and Sciences

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.

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). An interdisciplinary approach to Greek and Roman myths, including their historical and contemporary relevance.

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.

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.

HIST 170. WORLD HISTORY II: PROBLEMS IN THE HUMAN PAST (3). Thematic, comparative overview of major problems in human history before ca. 1500. Emphasis varies by instructor.

HIST 171. WORLD HISTORY II: PROBLEMS IN THE HUMAN PAST (3). Thematic, comparative overview of major problems in human history since ca. 1500. Emphasis varies by instructor.

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.

PHIL 101. INTRODUCTION TO PHILOSOPHY (3). Study of some major philosophical issues, for example, the sources and limits of human knowledge, the meaning of human existence, the nature of morality, the existence of God, the relation of mind and body, and freedom of the will. Emphasis is on understanding philosophical theories and using the techniques of philosophical reasoning. Readings may be taken from traditional as well as contemporary sources.

PHIL 105. LOGIC AND CRITICAL REASONING (3). Introduction to basic principles of rational argument evaluation in everyday life. Topics include deductive reasoning, the logic of truth functions and categorical statements, informal fallacies, 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 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.

POLS 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.

Courses from the College of Visual and Performing Arts

ARTH 282. INTRODUCTION TO WORLD ARTS (3). A global survey of practices in the visual arts from ancient times to the modern era.

ARTH 292. ART AND DESIGN SINCE 1900 (3). Modern and contemporary art and design.

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

ARTH 310. STUDIES IN ANCIENT AND MIDDLE-EASTERN ART (3). Rotating topics include Egypt, Mesopotamia, Aegean Art, Archaic and Classical Art, Hellenistic Art, Etruscan and Early Roman Art, Roman Imperial Art, Islamic Art. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 320. STUDIES IN MEDIEVAL ART (3). Rotating topics include Early Christian and Early Byzantine Art: 330-843, Middle and Late Byzantine Art: ca. 843-1453, Early Medieval Art: ca. 500-1000, Romanesque and Gothic Art. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 330. STUDIES IN EARLY MODERN EUROPEAN ART (3). Rotating topics include Early Italian Renaissance Art, Early Northern Renaissance Art, 16th Century Italian Art, 16th Century Northern European Art, 17th and 18th Century European Art. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 340. STUDIES IN MODERN AND AMERICAN ART (3). Rotating topics include American Art, 19th Century Art, 20th Century Art. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 350. STUDIES IN CONTEMPORARY ART (3). Rotating topics include various aspects of contemporary art from 1970 to the present. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 370. STUDIES IN ASIAN ART (3). Rotating topics include South and Southeast Asian Art, Southeast Asian Art, Chinese Art, Japanese Art, Islamic Art. May be repeated. Multiple enrollments are allowed in the same semester.

ARTH 380. STUDIES IN AFRICAN, OCEANIAN, NATIVE AMERICAN, PRE-COLUMBIAN ART, AND LATIN-AMERICAN ART (3). Rotating topics include Art of Africa, Oceania, and the Americas, Pre-Columbian Art, Latin American Art. May be repeated. Multiple enrollments are allowed in the same semester.

MUHL 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.

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 (7-11)

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 open for credit for majors in biological sciences or to students with previous credit in BIOS 104 (or its equivalent). The combination of BIOS 103 and BIOS 105 will be used as the equivalent of BIOS 104.

BIOS 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. Not open for credit for majors in biological sciences or to students with previous credit in BIOS 104. PRQ: BIOS 103 and CHEM 110.

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 107. EVOLUTION FOR EVERYONE (3). Beginning with core principles, exploration of evolutionary theory from an integrative and interdisciplinary perspective, with topics ranging from the biological sciences to all aspects of humanity. Not open for credit for majors in the 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 100. CHEMISTRY IN EVERYDAY LIFE (3). The principles of chemistry, with emphasis on the role of chemistry in the modern world. Includes topics such as energy resources, environmental issues, health and nutrition, and modern materials. Three hours of lecture/week.

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 210. 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.

CHEM 211. GENERAL CHEMISTRY II (3). Continuation of CHEM 210. 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 210 and CHEM 212. CRQ: CHEM 213.

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

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

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, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229; 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.

FCNS 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 or BIOS 109, or equivalent.

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. Students may receive credit for both MATH 211 and MATH 229, but only one of them will count toward the minimum number of hours required for graduation. PRQ: MATH 155 with a grade of C or better or satisfactory performance on the Mathematics Placement Examination. MATH 229 may count toward both the mathematics core competency requirement and the sciences and mathematics area requirement in distributive studies if a grade of C or better is earned. If a grade of D is earned, the course will count only toward the sciences and mathematics area requirement.

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.

PHYS 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.

PHYS 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 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 acoustics and acoustical measurements with modern electronic instruments. During the remainder of the course students choose experiments which fit their own particular interests. CRQ: PHYS 180 or consent of the department.

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: ELECTRO-MAGNETISM (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 (6-9)

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. INTRODUCTION TO LINGUISTIC ANTHROPOLOGY (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 nonmarket 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.

EPFE 355. SOCIOLOGY OF SCHOOLING (3). Introduction to the sociological study of schooling. Examination of the role of schools in modern society, the organizational features of schools, education as an institution and its relation to other social institutions, and the relationship between schooling and social inequality.

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 210. INTRODUCTION TO THE COURTS (3). Introduction to the study of law and courts, including legal theory, judicial institutions, legal actors, legal systems and ways in which law is interrelated with politics, public policy and society.

POLS 220. INTRODUCTION TO PUBLIC POLICY (3). *Crosslisted as PASA 220X.* 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.

POLS 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.

PSPA 220X. INTRODUCTION TO PUBLIC POLICY (3). *Crosslisted as POLS 220.* 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.

PSYC 102. INTRODUCTION TO PSYCHOLOGY (3). Basic psychological 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 (3-6)

AHRS 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.

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.

ARTE 109 - STRATEGIC VISUAL THINKING (3). Investigation of the role of visual design in the presentation of quantitative information in order to promote vigorous dialogue around the interactions of complex data streams, and this fosters robust decision-making. Introduction to social science research through data collection, quantitative analysis, and interpretation as students complete their own original survey research.

ARTH 360. STUDIES IN DESIGN (3). Rotating topics include 20th Century Architecture, Visual Communication, Design and Decorative Art. May be repeated. Multiple enrollments are allowed in the same semester.

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.). Not open for credit toward the major in biological sciences.

BKST 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.

BKST 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.

BKST 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.

CLCE 100. INTRODUCTION TO PUBLIC SERVICE (3). Introduction to community leadership and civic engagement including avenues for making contributions to community and society. Emphasis placed on nonprofit organizations, public service, volunteering, activism, and philanthropy, locally and globally.

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 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.

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 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 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 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 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.

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.

LGBT 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.

MEE 101. 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 socioeconomic points of view.

PHHE 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.

PHHE 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.

PHHE 295. INTRODUCTION TO PUBLIC 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.

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.

SEAS 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.

TECH 245. POLLUTION PREVENTION AND SUSTAINABLE PRODUCTION (3). Study of environmental and occupational health issues related to the design, manufacture, and application of technology. Analysis of case studies to evaluate potentially adverse outcomes and voluntary standards (EPA, OSHA, ISO). Application and implementation of environmentally sustainable design and manufacturing, and pollution prevention practices. Technology majors cannot use TECH 245 for general education credit.

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) MATH 229

Distributive Studies

The requirement 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. Students may not take all Humanities and Arts courses (9-12 semester hours) from the same college.

Courses from the College of Education

EPFE 321 - History of American Education (3)
 EPFE 410 - Philosophy of Education (3)

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 170 - World History I: Problems in the Human Past (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 - Logic and Critical Reasoning (3)
 PHIL 231 - Contemporary Moral Issues (3)
 POLS 251 - Introduction to Political Philosophy (3)

Courses from the College of Visual and Performing Arts

ARTH 282 - Introduction to World Arts (3)
 ARTH 292 - Art and Design Since 1900 (3)
 ARTH 294 - Art History Survey IV: Arts of the East (3)
 ARTH 310 - Studies in Ancient Art and Middle Eastern Art (3)

* MATH 229 may count toward both the mathematics core competency requirement and the sciences and mathematics area requirement in distributive studies if a grade of C or better is earned. If a grade of D is earned, the course will count only toward the sciences and mathematics area requirement.

ARTH 320 - Studies in Medieval Art (3)
 ARTH 330 - Studies in Early Modern Art (3)
 ARTH 340 - Studies in Modern and American Art (3)
 ARTH 350 - Studies in Contemporary Art (3)
 ARTH 370 - Studies in Asian Art (3)
 ARTH 380 - Studies in African, Oceanian, Native American, and Pre-Columbian Art (3)
 MUHL 220 - Introduction to Music (3)
 TH-D 222 - Dance and the Fine Arts (3)
 THEA 203 - Introduction to Theatre (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 105 - General Biology Laboratory (1)
 BIOS 106 - Environmental Biology (3)
 BIOS 107 - Evolution for Everyone (3)
 BIOS 109 - Human Biology (3)
 CHEM 100 - Chemistry in Everyday Life (3)
 CHEM 110 - Chemistry (3)
 CHEM 111 - Chemistry Laboratory (1)
 CHEM 210 - General Chemistry I (3)
 CHEM 211 - 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 181 - Acoustics Laboratory (1)
 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 - Introduction to Linguistic Anthropology (3)
 ECON 160 - Contemporary Economic Issues (3)
 ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)
 EPFE 355 - Sociology of Schooling (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 210 - Introduction to the Courts (3)
 POLS 220 - Introduction to Public Policy (3)
 POLS 260 - Introduction to Comparative Politics (3)
 POLS 285 - Introduction to International Relations (3)
 PSPA 220X - Introduction to Public Policy (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.

AHRS 200 - Disability in Society (3)
 ANTH 101 - Human Origins (3)
 ARTE 109 - Strategic Visual Thinking (3)
 ARTH 360 - Studies In Design (3)
 BIOS 101 - Plant Products and Human Affairs (3)
 BKST 200 - Racism in American Culture and Society (3)
 BKST 211 - Educating for Cultural Sensitivity (3)
 BKST 219 - Introduction to African Studies (3)
 CLCE 100 - Community Leadership and Civic Engagement (3)
 EPFE 201 - Education as an Agent for Change (3)
 EPFE 400 - Foundations of Education (3)
 FCNS 207 - The Consumer (3)
 FCNS 280 - Human Development, the Family, and Society (3)
 FCNS 406 - Global Food and Nutrition Issues (3)
 LGBT 350 - Lesbian, Gay, Bisexual, And Transgender Studies (3)
 HIST 323 - History of Science to Newton (3)
 IDSP 225 - Introduction to Medieval Society and Culture (3)
 ILAS 100 - Introduction to Latin American Civilization (3)
 ILAS 261 - Language, Mind, and Thought (3)
 KNPE 100 - Scientific Basis of Human Activity (3)
 KNPE 111 - Sport: Culture and Society (3)
 LGBT 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
 MEE 101 - Energy and the Environment (3)
 PHHE 201 - Social and Individual Patterns of Drug Use (3)
 PHHE 206 - Contemporary Health Concepts (3)
 PHHE 295 - Introduction to Public Health (3)
 PSYC 245 - Thinking (3)
 SEAS 225 - Southeast Asia: Crossroads of the World (3)
 TECH 245 - Pollution Prevention and Sustainable Production (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, unless the degrees are earned concurrently. If earned concurrently, both degree requirements must be met with a minimum of 120 semester hours.

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 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.

American Sign Language: AHRS 101, AHRS 102, AHRS 201, AHRS 202
 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
 Successful completion of FLST 181 and FLST 182, in the same language.

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. For American Sign Language, a skills test is administered by the School of Allied Health and Communicative Disorders.

OR

registration as an international student at NIU, with a native language other than English.

* 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.

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.

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

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 six 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.

Postbaccalaureate 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.

Applying for Graduation

Degrees are granted in December, May, and August.

Undergraduate 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 is found in MyNIU by navigating to Self Service> Degree Progress/Graduation> Apply for Graduation. The graduation fee will be applied to the student account at the time of application. The deadlines for applying for graduation and commencement are as follows:

December graduation: apply March 1 – July 1

May graduation: apply August 1 – February 1

August graduation: apply August 1 – June 15

(Note: August graduates who wish to participate in the May commencement ceremony must apply for August graduation by December 1.)

Further correspondence regarding eligibility towards graduation may be sent via ZID e-mail account from the department, college office, or Registration and Records. Students with graduation deficiencies should contact their academic advisor for assistance. Students who do not complete all requirements during the term for which they applied must change their graduation date in Registration and Records by the next deadline date or no later than 30 days into the following semester. It is the student's responsibility to notify the Office of Registration and Records in writing of their next intended graduation date. An additional fee is not required.

Students completing degree requirements between degree dates may request an early posting of their degree. Contact the Office of Registration and Records for details.

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."

Educator Licensure Requirements

Students seeking initial professional educator licensure should contact the academic department offering the licensure program (see below). NIU's Office of the University Coordinator of Educator Licensure 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 educator license. NIU offers initial educator licensure entitlement programs which are approved by the Illinois State Board of Education (ISBE). NIU is accredited by the Council for the Accreditation of Educator Preparation (CAEP). Below is a list of ISBE-approved initial educator licensure entitlement programs together with the academic department (or departments) at NIU with responsibility for administering each program.

Requirements for NIU educator licensure 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 licensure, a student may find his or her licensure requirements changed for reasons beyond the university's control.

A student pursuing licensure should meet with her or his adviser to develop a plan of study that will satisfy the licensure 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 licensure will not be changed by the adviser except to the extent that it may be necessary to satisfy changes in state licensure 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 licensure plan of study and other published descriptions of licensure 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.

Entitlement Program

*Early Childhood License
(birth through grade 3)*

*Standard Elementary
License (K-9)*

*Standard High School
License (6-12)*

Biological Science

Chemistry

Earth and Space Science

English

Environmental Science

Academic Department/School

Family, Consumer, and
Nutrition Sciences or
Teaching and Learning

Literacy and Elementary
Education

Biological Sciences

Chemistry and Biochemistry

Geology and Environmental
Geosciences

English

Geology and Environmental
Geosciences

Family and Consumer Sciences

Health Education

History

Mathematics

Physical Education

Physics

Social Science including
economics, geography, political
science, psychology, and
sociology and anthropology

*Standard Special License
(K-12)*

Art and Design¹

Blind and Partially Seeing

French

German

Learning Behavior Specialist I

Music

Physical Education

Spanish

Family, Consumer, and
Nutrition Sciences

Nursing and Health Studies

History

Mathematical Sciences

Kinesiology and Physical
Education

Physics

History

Art and Design

Special and Early Education

Foreign Languages and
Literatures

Foreign Languages and
Literatures

Special and Early Education

Music

Kinesiology and Physical
Education

Foreign Languages and
Literatures

Students who wish to pursue more than one educator license must complete the NIU program requirements for each license. 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 educator licensure programs.

Admission to Educator Licensure Programs

Each department has determined whether enrollment in a degree program is necessary to pursue the educator licensure 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 licensure program. Candidates for admission to an educator licensure program should apply directly to the academic department responsible for administering the program regarding information about admission.

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

The GPA for all postbaccalaureate students, including those whose initial baccalaureate degree was earned at NIU, will include only postbaccalaureate 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 licensure program.

University Requirements for Educator Licensure

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

Common Requirements for Educator Licensure

Upon satisfactory completion of one or more of the above initial educator licensure programs, students will be recommended for licensure. In order to be licensed 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 licensure. (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 licensure program. A passing grade is required in all course work taken for educator licensure. Educator licensure requirements are deemed to be met only by obtaining a grade of C or better in courses using traditional A, A-, B+, B, B-, C+, C, D, F grading or an S in those professional or clinical courses in which S/U grading is used. An S is the equivalent to a C or better and a U is equivalent to a D or lower in educator licensure courses using S/U grading. In those courses in which S/U grading basis is applicable, the use of S and U will apply to all students registered in any class section in which S/U grading is employed. Individual students may not elect S and U grading. 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 license is sought.

An earned baccalaureate degree from a recognized institution.

Successful completion of the Test of Academic Proficiency (TAP) or requirement, a test of subject matter knowledge, and the Assessment of Professional Teaching test administered by the Illinois Licensure Testing System are all required for licensure.

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 Educator Licensure

The university's general education requirements for educator licensure 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 licensure.

Professional Education Requirements for Educator Licensure

Early Childhood License
Standard Elementary License
Standard High School License
Standard Special License

Each type of license 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 Licenses are listed in the department sections of this catalog.

Endorsements

Middle Grades Endorsements

Students seeking an elementary or secondary educator license who wish to teach in the middle school grades (5-8) must have a middle grades endorsement on their licenses. 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 licensure.

Secondary Endorsements

Students seeking a secondary educator license who wish to be endorsed to teach additional subjects must have secondary subject-matter endorsements on their licenses. 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 licensure.

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 licensure 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 Educator Licensure Programs

Admission to educator licensure programs does not guarantee continued acceptance unless the student maintains satisfactory grades and other qualifications. A candidate for a student teaching assignment or licensure 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 educator licensure program are determined by the faculty offering that program; students should consult the academic department for information.

Specific degree, content-area, professional education and clinical coursework that forms part of an application for licensure, endorsement, or state approval must have been passed with a grade no lower than C, or the equivalent, in order to be counted towards fulfillment of the applicable ISBE requirements. Students must see individual program advisors for the list of courses required.

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 educator licensure 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.

For initial teacher licensure and advanced programs with students who do not hold current employment in a school or district: Students should contact the school district office of their placement site to confirm the location and availability and to determine how to proceed to obtain an FBI finger-print based CBC. Students should follow the district's policies and use their preferred provider and payment options. Students need to be aware that a new CBC will be required for each new district they will be placed at for a clinical or student teaching placement. This means there will be a charge for each new CBC required.

Students need to be aware there are potential consequences of having any criminal history. This FBI-mandated change means schools will now be the owners of the CBC information, and they will decide whether or not a conviction warrants exclusion from their schools and classrooms. Schools have the option of rejecting candidates based on their criminal history.

Contact your adviser for further details.

Out-of-State Employment in Public Schools

Other states have similar or additional licensure, licensing, or employment requirements. NIU is not responsible for informing any student of statutes, rules, or regulations which might affect the future licensure or employment of teachers. Students wishing admission to any NIU educator licensure program are responsible for determining their own eligibility for eventual licensure 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 educator licensure 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 advisers 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 161
 Education—elementary education: Gabel Hall 152
 Education—kinesiology and physical education: Anderson Hall 214
 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 304A
 Academic Advising Center—Adams Hall, 4th Floor

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 declare their major 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.

Change of Major or Declaration of Minor

Students will be placed into the major and emphasis, if applicable, at the point of admission if they meet the admission requirements of the degree program. 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 admission. 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.

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.

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

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.

Registration

Registration information can be found online under Student Help using MyNIU at <http://www.niu.edu/myniu>. Students will not receive credit for any course for which the registration was not completed according to university procedures. Moreover, it is not legitimate to attend or participate in a course in which one is not registered.

Students who have any obligation to the university (such as unpaid fines, tuition, fees, residence hall charges, missing admission documents) will not be allowed to register for classes until all obligations are met and should not expect retroactive enrollment for a period of time during which they were not eligible to register. (See "Academic Records and Encumbrances.")

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 (minimum of 9 semester hours). 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)
 Adolescence (NIU Collaborative on Early Adolescence)
 Applied Ethics (College of Business and College of Liberal Arts and Sciences; see "Inter-College Interdisciplinary Certificates.")
 Asian American Studies (College of Liberal Arts and Sciences)
 Business Analytics Using SAP Software (Department of Operations Management and Information Systems)
 Civic Engagement (Center for Non-Governmental Organization Leadership and Development)
 Creative Writing (English)
 Criminology (Sociology)
 Digital Media Production (Communication)
 Finance (Department of Finance)
 Foundations of Educational Studies (Department of Leadership, Educational Psychology and Foundations)
 Geographic Information Systems (Department of Geography)
 Gerontology (College of Health and Human Sciences)
 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.")
 Illinois Director Credential Certificate-Level 2 (School of Family, Consumer and Nutrition Sciences)
 Infant Toddler Credential Certificate-Level 5 (School of Family, Consumer and Nutrition Sciences)

Information Systems (Department of Operations Management and Information Systems)
 Interactive Marketing (Department of Marketing)
 Lean Six Sigma (College of Engineering and Engineering Technology)
 Lesbian, Gay, Bisexual, and Transgender Studies (College of Liberal Arts and Sciences)
 Logistics (Department of Industrial and Systems Engineering)
 Middle School Literacy (Department of Literacy and Elementary Education)
 Mobile Programming (Department of Computer Science)
 Nanotechnology (College of Engineering and Engineering Technology)
 Philosophy of Education (Department of Leadership, Educational Psychology and Foundations)
 Professional Selling (Department of Marketing)
 Professional Teaching Practices (College of Education)
 Public Sector Leadership (Departments of Political Science and Public Administration)
 Religious Studies (College of Liberal Arts and Sciences)
 Service Management (Department of Operations Management and Information Systems)
 Social Entrepreneurship (Department of Operations Management and Information Systems)

Schedule Changes

Schedule changes may have serious academic and financial consequences. It is highly recommended that students meet with their academic advisers prior to any schedule changes. Contact the Financial Aid Office regarding the impact of schedule changes and any financial aid. International students need to contact the International Student and Faculty Office (ISFO). Students living in university housing who are reducing their schedule to less than 12 hours or are withdrawing from the university must contact the Housing Office. Reducing hours can also impact student insurance, contact Student Insurance for additional information. Student-Athletes should contact Student Athletes Academic Support Services (SAASS).

See chart and detailed procedures below including the Undergraduate Academic Calendar for appropriate deadlines for adding/dropping a course and for withdrawals. Other deadlines may apply for 14-week, summer, and dynamic (non-standard) courses. Refer to MyNIU for course specific deadlines.

Schedule Change Process for 16 week courses (full-semester)

Action	Dates Start with First Week of Semester	Steps
Dropping all courses	Prior to the first day of class	Self-service MyNIU
Adding a course	Week 1	Self-service MyNIU
Adding a course	Week 2	Contact department of Course
Dropping a course	Week 1	Self-service MyNIU
Dropping a course	Week 2	Contact major college or Academic Advising Center
Withdrawing from a course	Week 3 through end of Week 8	Contact major college or Academic Advising Center
Withdrawing from the university	Week 1 through end of Week 8	Contact major college or Academic Advising Center
Withdrawing from the university	Week 9 through end of Week 12 (with academic jeopardy)	Contact major college or Academic Advising Center

Schedule Change Process for 8 week sessions (first and last half-semester)

Action	Dates Start with First Week of Session	Steps
Dropping all courses	Prior to the first day of semester	Self-service MyNIU
Adding a course	Week 1 of session	Self-service MyNIU
Dropping a course	Week 1 of Session	Self-service MyNIU
Dropping a first-half Course	Week 2 of session	Contact Major College or Academic Advising Center
Withdrawing from a first-half course	Week 3 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdrawing from a second-half course	Week 2 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdrawing from the university	Week 1 of session through end of Week 4 of session	Contact Major College or Academic Advising Center
Withdrawing from the university	Week 5 of session through week 6 of session (with academic jeopardy)	Contact Major College or Academic Advising Center

Adding or Dropping a Course

Add/drop procedures include adding a class, dropping a class, and changing to a different section of the same course. For 16 week courses, students may make changes to their schedules during the first week of class through My NIU. Courses may be dropped during the second week of the term by permission of the student's major college, or the Academic Advising Center for students with no major college affiliation. Sixteen-week courses which are dropped by the end of the second week of classes will not appear on a student's record. Beginning with the third week of classes of a fall or spring term, all course load reductions become withdrawals, with the exception of last-half semester courses. Other deadlines may apply for 14-week, summer, and dynamic (non-standard) courses. Refer to MyNIU for course specific deadlines. Courses may be added to a student's schedule during the second week of the term by permission of the department offering the course.

Withdrawal from a Course

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-session 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 has no effect on semester or cumulative GPA.

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. Visiting students initiate withdrawals through the College of Liberal Arts and Sciences.

A student may withdraw from a course after the established deadlines only in exceptional cases (medical reasons, military reasons, or because of hardship) when supported by acceptable evidence. Approval of a course withdrawal after the deadline may be granted only by the college office of the student's major (major college office), or by the Academic Advising Center if the student

has no college affiliation. If such approval is given, academic jeopardy will be enforced: W will be recorded for the course if the instructor indicates the student is passing at the time of withdrawal; if the instructor indicates the student is not passing at that time a grade of F will be recorded and included in both the term and cumulative GPA.

Additional information regarding withdrawals for exceptional reasons can be found at <http://www.stuaff.niu.edu/stuaff/studentlifepolicies/withdraw.shtml>.

Students seeking a withdrawal from a course for exceptional reasons must initiate and complete the withdrawal process during the semester of enrollment in the course.

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.

<i>Transfer Plus Pre-enrollment NIU Hours</i>	<i>Maximum Withdrawal Hours</i>
1-6	17
7-15	15
16-30	12
31-45	9
46 or more	6

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

Withdrawal from the University

All students are encouraged to meet with an academic adviser if they are considering withdrawing from the university. Any undergraduate student who decides to withdraw from the university must notify their 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. Students who withdraw from the university within the add/drop period will have those courses removed from their record. Contact the Bursar's Office regarding information on tuition refunds. A university withdrawal may be made without academic jeopardy up to the end of the eighth week of the semester for 16-week courses. When students officially withdraw from the university after the eighth week of the term academic jeopardy will be enforced: W will be recorded for the course if the instructor indicates the student is passing at the time of withdrawal; if the instructor indicates the student is not passing at that time a grade of F will be recorded and included in both the term and cumulative GPA.

A student may withdraw from the university after the established deadlines only in exceptional cases (medical reasons, military reasons, or because of hardship) when supported by acceptable evidence. Approval of a university withdrawal after the deadline may be granted only by the college office of the student's major (major college office), or the Academic Advising Center if the student has no college affiliation. If such approval is given, academic jeopardy will be enforced: W will be recorded for the course if the instructor indicates the student is passing at the time of withdrawal; if the instructor indicates the student is not passing at that time a grade of F will be recorded and included in both the term and cumulative GPA.

Additional information regarding withdrawals for exceptional reasons can be found at <http://www.stuaff.niu.edu/stuaff/studentlifepolicies/withdraw.shtml>.

Students seeking a withdrawal from the university for exceptional reasons must initiate and complete the withdrawal process during the semester of enrollment. A student who withdraws from the university must obtain permission from her or his last major college or the Academic Advising Center, if the student has no college affiliation, to re-enroll during the semester in which the student withdrew from the university, if that reenrollment will occur after the add/drop period.

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.

Meaning		Points Per Hour
A	Outstanding competence	4.00
A-		3.67
B+	Above satisfactory competence	3.33
B		3.00
B-		2.67
C+	Satisfactory level of competence	2.33
C		2.00
D	Marginally satisfactory competence	1.00
F	Unsatisfactory level of competence	0
I	Incomplete	—
W	Passing at time of withdrawal from a course or from the university	—
S	Satisfactory	—
U	Unsatisfactory	—
O	Audit; no grade and no credit	—
OW	Audit; requirements not completed	—
CR	Proficiency credit	—

A, A-, B+, B, B-, C+, C, D, 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.

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, A-, B+, B, B-, C+, C, D, or F are recorded), as in the following examples.

Examples of GPA calculation for grades earned under the plus/minus grading option.

Example #1

	Course Credit	Grade	Grade Points/Credit	Total; Grade Points
	3	A	4.00	(3 x 4.00) 12.00
	3	A-	3.67	(3 x 3.67) 11.01
	3	B+	3.33	(3 x 3.33) 9.99
	4	B+	3.33	(4 x 3.33) 13.32
	3	B	3.00	(3 x 3.00) 9.00
Totals	16			55.32
Term GPA				(55.32/16) 3.458

Example #2

	Course Credit	Grade	Grade Points/Credit	Total; Grade Points
	3	A-	3.67	(3 x 3.67) 11.01
	3	B+	3.33	(3 x 3.33) 9.99
	4	B-	2.67	(4 x 2.67) 10.68
	3	C+	2.33	(3 x 2.33) 6.99
	4	C	2.00	(4 x 2.00) 8.00
Totals	17			46.67
Term GPA				(46.67 /17) 2.745

Cumulative GPA. Calculation of cumulative GPA combines grade points earned in each course over all terms is as follows:

	Course Credit	Total Grade Points
Term 1	16	55.32
Term 2	17	46.67
Totals	33	101.99
Cumulative GPA		(101.99/33) 3.091

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. Educator licensure requirements are deemed to be met only by obtaining a grade of C or better in courses using traditional A, A-, B+, B, B-, C+, C, D, F grading or an S in those professional or clinical courses in which S/U grading is used. An S is the equivalent to a C or better and a U is equivalent to a D or lower in educator licensure courses using S/U grading.

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 120 calendar days from the end of the term in which the student received the grade 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. 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. 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. In approved third or subsequent enrollments the grade earned during the last enrollment will be used in the GPA calculation.

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 posted in MyNIU, 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 appropriate college office of the course. 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 entry into MyNIU. 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.

Freshman Warning, Academic Probation and Dismissal

First-semester freshmen at NIU who earn a cumulative GPA of 1.60 to 1.99 for all work completed at NIU will be placed on freshman warning. A student who does not earn a minimum cumulative 2.00 GPA by the end of their second enrollment at NIU will be placed on academic probation. First-semester freshmen whose GPA falls below 1.60 for all work attempted at NIU will be placed on probation and 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 freshman warning or probation are required to schedule an appointment with the dean (or the dean's delegate) of their major college to discuss their academic status. Students placed on freshman warning or probation who have no college affiliation are required to schedule an appointment with the Vice Provost (or the Vice Provost's delegate).

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 restrictions. 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. No specific grade is attached to this credit; however, credit by examination will meet any requirement for a grade of "C" or better in the course for which credit has been awarded.

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

For students earning an A.A. or A.S., or A.A.T. degree in early childhood, secondary math, or special education 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 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.

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.

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 regionally 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.

NIU will accept completed transfer work with a grade of D. Be advised that a grade of C or better is necessary to meet the requirements for many core competency courses, prerequisite courses, majors, minors and certificates.

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).

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.

Military Educational Experience Credit

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*. NIU awards 100- or 200-level elective credit only for courses evaluated and recommended as upper-division by the American Council on Education (ACE). Students seeking credit must submit an official transcript from the ACE Transcript Service to NIU.

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.

See also the Credit by Examination Section of this catalog for academic regulations regarding college credit earned through CLEP (College Level Examination Program) and Defense Activities for Non-Traditional Educational Support (DANTES).

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.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. Credit hours in excess of 66 will be displayed on the student's transcript; however, in all cases, the student will be required to complete at least 54 semester hours from the following sources: NIU credit, credit from other 4-year schools, proficiency credit, and up to 8 semester hours of physical education activity credit of which up to 4 physical education activity credit hours may be earned at community colleges.

Illinois community college A.A. or A.S. graduates, or A.A.T. graduates in early childhood, secondary math, or special education, 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 educator licensure.

Students majoring in a department in the College of Engineering and Engineering Technology.

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, or an A.A.T. degree in early childhood, secondary math, or special education, 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 educator licensure 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 who is an enrolled NIU student (enrollment not interrupted by more than one year) who earns a baccalaureate-oriented A.A., A.S. or approved A.A.T. degree from an Illinois public community college, will have satisfied NIU's general education requirements upon receipt of the official transcript with the degree posted. The student must meet the terms of concurrent enrollment, if applicable, and meet NIU's residency requirements for graduation.

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-, 600-, or 700-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- or 700-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 (any 500-, 600-, or 700-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.")

Undergraduates in Law Courses

Undergraduates enrolled in a 3+3 program in the Department of Political Science who are matriculated in the College of Law may take up to 30 hours of Law course work to apply towards their baccalaureate degrees.

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.

Leaves of absence will be granted for volunteer services related to disaster relief in accordance with applicable Illinois statutes or executive orders issued by the State of Illinois in response to emergency situations. To initiate a leave of absence, students should contact their College Dean's office, or the vice provost (or the vice provost's delegate) for any student who has no college affiliation. Following the period of volunteer service, Registration and Records will facilitate reenrollment of the student.

Students are expected to comply with each individual instructor's established attendance policy. It is recommended that students avoid registering for classes in which they would amass significant absences. In the case of an absence due to required attendance at a university-sponsored event such as a department trip, performing arts activity, ROTC function, or athletic competition, reasonable attempts shall be made by faculty members to allow

the student to make up missed work. Students are responsible for completing the work assigned and/or due on the days they are absent for university-sponsored events. Both the sponsoring unit and the student should inform the faculty member as soon as possible in the semester in order for arrangements to be made for completing missed assignments, examinations or other required course work. The student is required to provide each instructor with an official notification in advance of the absence (e.g., a letter from the chair of the sponsoring department, the head of the sponsoring unit, or the coach).

Accommodations for Students with Disabilities

Students with disabilities are encouraged to contact the Disability Resource Center (DRC) early in their NIU experience, preferably as soon as they are aware they will need one or more accommodations. The DRC works with students and faculty to make curricular and campus experiences accessible and helps determine reasonable and appropriate accommodations for courses, programs and activities. The DRC will determine with the student, through an interactive process, the following: 1) the nature of the "documentation of disability" required; 2) appropriate accommodations; and 3) how the faculty or staff in charge of the curricular or cocurricular activity will be informed of the need for accommodation, usually through a Letter of Accommodation (LOA). Students are strongly encouraged to meet and talk with their faculty to identify their requests for accommodations as early as possible in the semester, even if they won't use all accommodations right away. Requests for accommodations must be made in a timely enough manner for them to be reviewed by the university, and requests for accommodations are not retroactive. The DRC staff will provide guidance to faculty, when needed, about how to implement accommodations. Students who make requests for accommodations are expected to follow DRC policies and procedures.

A wide range of services, based on the individual student situation, can be explored. This includes curricular and cocurricular activities, such as housing, accommodated testing, alternate format of instructional materials, and transportation. Students can visit the DRC on the fourth floor of the Health Services building during business hours or make an appointment by calling 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 Office of Community Standards and Student Conduct 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 Office of Community Standards and Student Conduct 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. With regards to finding the student either responsible or not responsible for his or her action, the ruling of the Judicial Hearing Board shall be binding. In cases where there is either a finding of responsibility or an admission of responsibility by the student, any recommendations by the hearing board regarding the course grade are non-binding on the instructor, who remains solely responsible for assigning a course grade, consistent with the policies set forth in the course syllabus.

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.

Oral English Proficiency in the Classroom

The state of Illinois requires that all classroom instructors at public higher education institutions be able to communicate effectively in the English language. Students should communicate concerns about the oral English language proficiency of instructors to the chair of the department in which the course is offered or, if the student prefers, to the Ombudsman, who will work with the department to resolve the matter.

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.

Fee Coverage¹

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 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. 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 nonimmigrant students: \$125.00
 Graduation fee (baccalaureate degree): \$29.00
 Outreach delivery fee: \$56.00 per semester hour
 Replacement identification card (after the first is issued): \$25.00
 Transcript fee: \$5.00

Class material fees where applicable will be billed as part of the total billing. See <http://www.niu.edu/bursar/tuition/other.shtml> for a summary of fees and common charges.

Room and Board Rates

Residence Hall Room and Board rates for the 2014-2015 academic year range from \$4,835 per semester for a double occupancy room with an "All-access meal plan" or "Huskie 65 A-la-carte Plan" to \$6,400 per semester for a single room with a "Huskie 90 A-la-carte meal plan."

Refund Policies²

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. 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 prior to the end of the add/drop period for the courses in which the student is registered— all tuition and fees.

If withdrawal is within the period following add/drop and before the 60 percent point in time of the period of enrollment—a refund equal to the portion of the period of enrollment remaining.

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.

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 and Enrollment Management to request an adjustment of charges for tuition and fees and to receive a partial or full refund when university

¹ General fees (i.e., Activity, Athletic, Facilities, Services, Student Resource and Technology Surcharge) are required of all students, unless a partial refund is warranted by study and residence more than 15 miles from campus. See Tuition, Fees, and Surcharges as listed on the Office of the Bursar web site: <http://www.niu.edu/bursar/>

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.

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 and Enrollment Management. 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 and Enrollment Management 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.

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 Affairs.

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

Payment of all charges on the student's account is due seven days prior to the start of the term to which they apply. Any additional expenses incurred after this initial **payment due date** for the term will be due by the due date indicated on the student's MyNIU account. Any student who pays less than the total amount due on the payment due date will be assessed a 1.08% late payment fee on the unpaid balance. This late payment fee will be assessed monthly on the unpaid balance that continues to be past due.

Any student with a past due balance remaining at mid term will have a **hold** placed on the student's account records. This hold will prohibit the student from registering for classes and/or obtaining official transcripts until the account balance is paid in-full.

Financial Responsibility: By registering for courses at Northern Illinois University the student is accepting financial responsibility for the costs of and related to the student's registration at the university including choosing to reside in the university's residence halls, selecting a meal plan, or other university services. In the event a student's account is past due, late payment fees will be applied to past-due amount. Continued failure to pay a past due debt may result in the debt being listed with credit bureaus, the State Comptroller's Offset Program and, if necessary, referred to a collection agency and/or authorize legal action for the collection of this debt. The student is then responsible for all fees and costs incurred by the University in the collection of the past due debt, including collection fees and/or attorney's fees.

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. Nonhourly 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.

A variety of financial aid is available to qualified students attending NIU. Questions concerning financial assistance should be directed to this office or online at finaid@niu.edu.

The SFAO customer service windows are open from 8:00 a.m. to 4:30 p.m. Monday through Friday. For contact information call 815-753-1395 or visit <http://www.niu.edu/fa/contact.shtml>.

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) and admitted to 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 Direct Loan, Federal Parent Loan for Undergraduate Students, or Federal Supplemental Loan for Students.
- not owe a repayment to a grant program.
- be making satisfactory academic progress per federal financial aid regulations.
- be aware that financial aid will not cover audit classes.
- agree to use any student financial aid received solely for educational expenses.
- begin attendance in all courses for which aid is received.

To apply for any type of financial aid, students must complete and submit the Free Application for Federal Student Aid (FAFSA) listing NIU's school code, 001737. You may choose any of these three methods to file a Free Application for Federal Student Aid (FAFSA):

- Apply online at www.FAFSA.gov (Recommended) or
- Complete a PDF FAFSA at <http://www.fafsa.ed.gov/options.htm>. (Note: PDF FAFSAs must be mailed for processing) or
- Request a paper FAFSA by calling the Federal Student Aid Information Center at 1-800-4-FED-AID (1-800-433-3243) or 1-319-337-5665. If you are hearing impaired, please contact the TTY line at 1-800-730-8913.

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" based on the student's computed financial need. Need is determined by subtracting the FAFSA calculated Expected Family Contribution (EFC) from the student's total cost of attendance/financial aid budget. 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 federal 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 and it is the student's responsibility to contact the SFAO or visit their website 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. Eligibility for summer session aid is determined once the student is enrolled in summer session courses.

Students who receive financial assistance and withdraw from the university, or cease to participate in a semester without formally withdrawing from the university, 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 who do not begin attendance in all registered courses may have financial aid reduced.

Satisfactory Academic Progress for Undergraduates/Postbaccalaureates

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 postbaccalaureates. Detailed information about satisfactory academic progress standards and procedures is available at www.niu.edu/fa/policies.

Federal and state financial aid programs covered by this policy are the following: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loan, Federal Work Study (FWS), Federal Direct Loan Program (Subsidized and Unsubsidized), NIU grants, and other sources such as the Illinois State Monetary Award Program (MAP), the Federal Direct PLUS Loan for parents, and certain private 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 (PACE)

A student must successfully complete at least 67% of all credit hours attempted. NIU withdrawals, incompletes, and courses repeated will be counted in the calculation of hours attempted. Earned A, A-, B+, B, B-, C+, C, D, 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 who has attended NIU for three or fewer semesters and has less than 45 credit hours must have at least a 1.60 cumulative GPA. All other undergraduates must have at least a 2.00 cumulative GPA.

A student who is academically dismissed, even if that student appeals and is reinstated, is not meeting the standards of satisfactory academic progress.

If a student repeats a course, only the grade of the latest retake of the course will be used in the GPA calculation for satisfactory academic progress.

The first semester a student does not meet the pace or GPA requirement they are placed on SAP Warning. During the warning semester the student continues to be eligible for financial aid. If the deficiency is not resolved after the warning semester the student is ineligible for financial aid their next term of enrollment. Such students may formally appeal their ineligibility for financial aid by following the guidelines under the "Appeal Procedures" section of this policy.

Maximum Time Frame Requirement

An undergraduate student may receive financial aid until she or he has attempted 150% of hours required for degree inclusive of credit from NIU and/or transfer schools. For most undergraduate programs the 150% maximum time frame is 180 attempted credit hours. This policy will consider all terms of enrollment whether or not financial aid was received. 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. Earned A, A-, B+, B, B-, C+, C, D, 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. 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.

Undergraduate Change of Major

In the appeal process, up to one change of an undergraduate major will be considered. Two or more changes of an undergraduate major may be appealed with extenuating circumstances and in consultation with the advising dean. Transfer from another institution is considered a change of major.

Undergraduate Additional Degree

In the appeal process, pursuit of a second bachelor's degree will be considered. Three or more bachelor's degrees may be appealed with extenuating circumstances and in consultation with the advising dean.

Evaluation

The standards of satisfactory academic progress, cumulative GPA, pace and maximum time frame, are reviewed at the conclusion of each semester. Students who are not meeting either the GPA or pace standards at the end of any semester will be placed on Financial Aid Warning. A student on Financial Aid Warning may receive financial aid for the next semester they attend. The status of Warning is effective for one term of enrollment. If the student does not meet the minimum SAP standards by the end of the Financial Aid Warning semester, he or she will become ineligible for all federal and state financial aid, including grants, student loans, parent (PLUS) loans, and work-study in subsequent semesters until he or she again meets the SAP standards or has a financial aid SAP appeal approved. A student who exceeds the maximum timeframe standard will be ineligible for financial aid for the immediately following semester.

Detailed information regarding the appeal process will be sent to all students who fail to make satisfactory academic progress. If the appeal is approved, the student will be placed on an academic plan. Continued eligibility for financial aid is contingent on meeting all conditions of the academic plan or achieving all standards of satisfactory academic progress.

A student who attends without receiving financial aid can regain financial aid eligibility by achieving a cumulative GPA of 2.00 or higher **and** a pace of 67% or higher.

Appeal Procedures

Appeals must be submitted in writing to the Student Financial Aid Office. 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 other documentation when making a final determination.

The following reasons **are examples of** extenuating circumstances:

- documented medical circumstances
- documented learning disabilities
- documented death in family

In general, the following **will not be considered** as extenuating circumstances:

- performing well academically
- general adjustment to college life and/or academics
- more than two changes in academic major
- working beyond a second undergraduate degree

The appeal decisions of the Student Financial Aid Office are final and cannot be overturned by the U.S. Department of Education.

The official Satisfactory Academic Progress Policy and Procedures published on the SFAO website is the university's official policy and may have information more recent than the catalog print date.

Federal/State Assistance

Federal

Federal Pell Grant. This grant helps 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 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 Direct Loan. This is a student loan available to eligible undergraduate students attending school at least half time. Students ineligible for (or ineligible for the full amount of) Subsidized Federal Direct Loan and independent undergraduates generally have an option to borrow an Unsubsidized Federal Direct Loan. Subsidized Federal Direct Loans are based on financial need, and the federal government pays the interest while the student is enrolled at least half time in a degree seeking program. Unsubsidized Federal Direct Loans are not based on financial need, and the student is responsible for paying the interest from the date the funds are disbursed.

Federal Direct PLUS for parents. The link for the online PLUS application is available on the SFAO website.

Federal Supplemental Educational Opportunity Grant. This grant is for 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 Military Student Services provides a liaison between the U.S. Department of Veterans Affairs and student veterans and the dependents of disabled and 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 Veteran Grant, the Illinois National Guard Grant, and the Illinois MIA/POW Scholarship.

Incoming veterans are advised to contact the Military Student Services at least 45 days prior to the start of the semester to complete paperwork to receive their benefits. Veterans receiving benefits must complete an NIU Enrollment Certification Request Form each semester after fully enrolling in classes and notify the Veterans Assistance Office of all changes in enrollment. The NIU Enrollment Certification Form can be found on-line at <http://www.niu.edu/militaryservices>. Inquiries concerning educational benefits for veterans and their dependents may be directed to the Military Student Services, Northern Illinois University, Adams Hall, Room 409, DeKalb, Illinois 60115, 815-753-0691, or online at <http://www.niu.edu/militaryservices>. Office hours are 8:30 a.m. - 4 p.m., Monday through Friday.

State

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, 100 S. Grand Avenue E, Springfield, IL 62762, or visit their website at www.dhs.state.il.us.

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 undergraduates. Eligibility is determined based on information reported on the FAFSA. The maximum award is restricted to 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.

State Special Education Scholarships. These scholarships are available to undergraduate and graduate students seeking initial educator licensure 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.isac.org.

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, high school guidance 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. 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 opportunities are available to NIU students under the regular student employment and Federal Work-Study programs. Jobs are available through many university departments and include positions in Housing and Dining, the University Libraries, Campus Recreation, and the Holmes Student Center. For job openings, students should visit www.hr.niu.edu.

Federal law mandates that any person employed by Northern Illinois University after November 6, 1986 must complete Form I-9 to verify identity and employment authorization. Student employees must be prepared to present original documentation prior to the start of their employment. For more information, contact the Student Employment Office (815-753-1394).

Tuition Waivers for Senior Citizens

Anyone 65 years of age or older with an annual income under \$22,980 if single, or \$31,020 if married, is eligible to take credit courses, tuition free. The student must pay for all general university fees and any course-related fees. Tuition-paying students enrolled must constitute the minimum number of required students for the particular class, except for credit courses specifically designed for senior citizens. Those interested should contact the Student Financial Aid Office at 815-753-1395 or visit our website at www.niu.edu/fa/forms/index.shtml.

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 & YPN Scholarship
Randall N. Beck Memorial Scholarship
David & Diane Graf College of Business Rockford Endowed Scholarship
Donald R. Larson Endowed Scholarship
College of Business Scholarship
Nick and Kim Calamos Student Scholarship
Gaylen and Joanne Matthew Larson Scholarship
Dan Parmenter Memorial Scholarship Fund
Robert & Nikki Eickhoff Scholarship
Crane Composites COB Scholarship
Allstate Insurance Company Scholarship
Anthony E. & Christine Speiser Scholarship – Lane Tech HS
Breitzke Endowed Scholarship
Crocker Endowment for Business Leadership Scholarship
Delta Sigma Pi Scholarship in Business
Rita C Patti Student Endowed Scholarship

Department of Accountancy**

Accountancy Alumni
Accountancy Faculty Undergraduate Scholarship
Accountancy Faculty Graduate Scholarship
Accountancy Teaching Assistant Performance Award
Arthur J. Krupp Scholarship
ASCEND Outstanding Service Award

* 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.

Association of Latino Professionals in Finance and Accounting
 Service Award
 BDO USA LLP
 Ben Peters Memorial
 Beta Alpha Psi
 Beta Alpha Psi Outstanding Service Award
 Brian Deets Memorial
 Brilliant Financial Search
 Burge Family
 Caterpillar, Inc.
 CliftonLarsonAllen, LLP
 CohnReznick, LLP
 Crowe Horwath LLP
 Danielle Marie Pisterzi Memorial
 David & Fran Homan
 David & Karen Sinason Outstanding Intern Award
 Dean and Brenda DuCray
 DeKalb Genetics Foundation
 Deloitte LLP Scholarship
 Department of Accountancy Transfer Scholarship
 Donald & Donna Kieso Scholarship
 Dorice Pepin
 D. Zorea Scholarship
 Edilberto C. and Carmelita M. Ortiz
 Edward A. and Debra S. Rosenow Endowed
 Ernst & Young LLP Scholarship
 Federation of Schools Accountancy Award
 Financial Executive International (Chicago Chapter)
 Gaylen and Joanne Larson
 Grant Thornton LLP Scholarship
 Greg Hassler/NIU CPA Review
 Harry Wright Endowed Scholarship
 Illinois CPA Society
 Institute of Internal Auditors - Chicago Chapter
 Institute of Management Accountants (National)
 International Business Seminars
 Jim and Kathy Hendricks Endowed Scholarship
 Joe and Lynn Hoff
 John Deere Foundation
 John and Jackie Simon
 John Shigley and Winifred Shigley
 KPMG LLP Scholarship
 Lawrence and Merrily Nilles
 Matthew and Amy Sapp
 McDonalds
 McGladrey, LLP
 Michael and Patricia Strachan Scholarship
 Michael S. Deutch
 Miller Cooper & Co. Ltd. Scholarship
 Mowery & Schoenfeld, LLC
 National Association of Black Accountants Outstanding Service
 Award
 National Society of Accountants
 Patrick R. Delaney Memorial
 Paul & Karen Keglevic
 Plante & Moran PPLC Scholarship
 Public Company Accounting Oversight Board
 PricewaterhouseCoopers LLP Scholarship
 Raymond & Nancy Powers
 Russ and Dawn Smyth
 Ryan Hayman/HSBC
 Ryan LLC
 Sally Webber Memorial
 Sikich LLP Scholarship
 SpearMC Consulting Scholarship
 Steve and Betsy Young
 Student Accountancy Society Outstanding Service Award
 SunCoke Energy
 Tax Executives Institute (Chicago Chapter)
 The Overture Group

Vrba-O'Brien Trust
 Warady and Davis, LLP
 William and Dian Taylor
 Wipfli, LLP
 Wolf & Company LLP Scholarship
 Youthful Savings

Department of Finance

Financial Executive Institute-Fox Rock Chapter
 National Bank & Trust of Sycamore
 Clifford Danielson Scholarship
 William Wilbur Endowed Scholarship
 CFA Scholars Program
 Dennis Dean Endowed Scholarship
 James & Karen Hayman Endowed Scholarship
 Savant Capital Management Inc. Scholarship

Department of Management

Deb Brucker Scholarship
 Gladys M. Bahr Memorial Fund
 Kevin Casebolt Scholarship
 Management Alumni Scholarship
 Management Department Achievement Award
 Mike O'Connor Scholarship
 Peter and Luann Walton Scholarship
 Target Award for Leadership Excellence

Department of Marketing

Dr. A. H. Kizilbash Memorial Award
 Dr. John S. Wagle III Memorial Marketing Honor Society Award
 Forest Financial Group, Inc. Sales Award
 Giving is Good Scholarship
 Glaser Direct Business-to-Business Interactive Marketing Award
 Interpro Translation Solutions Global Marketing Scholarship
 John and Doris Ludes Scholar-Mentor Program in Marketing
 Johnson & Quin Interactive Marketing Award
 Marketing Achievement Award
 Marketing Scholar Award
 Marshall Cordell Entrepreneurial Scholarship
 OTA/OTR Global Award
 Outstanding Future Alumni Award
 Outstanding Seller Award
 Target American Marketing Association Award
 Thomas Gialamas Outstanding Marketing Student Award
 Wesley J. Welch Memorial Award
 William and Eileen Breitzke Endowed Scholarship in Marketing

Department of Operations Management and Information Systems

Academic Achievement Award
 Allstate Scholarships
 Caterpillar Scholarship
 Information Integrity Coalition Scholarship
 Jeffrey Burton Lollar Memorial Scholarship
 Matthew L. Johnson Scholarships
 Marian Elizabeth Millington Scholarship
 OM&IS Alumni Scholarship
 OM&IS EAC Scholarship
 OM&IS Faculty Scholarship
 Target SAP Scholarship
 True Value Scholarship
 William and Eileen Brietzke Scholarship

College of Education

John H. Johansen Scholarship in Education
 Jessie Griffith Memorial Scholarship
 Rista Simich Memorial Education Fund
 Orville Jones Memorial International Scholarship
 Thomas R. and Shirley Klein Scott Scholarship Fund
 Eunice B. Schwemm Scholarship Fund
 Julia Calliss Morris Scholarship

Teacher Education Scholarship
 Dr. Ernest E. Hanson Memorial Scholarship
 Circle of Gold – Classes of 1949, 1950, 1951 Scholarship
 Norman S. and Marion D. Gilbert Endowed Scholarship in Education
 Martin H. & Verna Conklin Bartels Memorial Scholarship Fund in Education
 Horvath Family Fund (once every four years)
 Nancy M. Vedral Scholarship
 Bettylou Holmes Burton Scholarship in Education Application
 Tim Gullikson Education Expendable Scholarship
 Tim Gullikson Education Memorial Scholarship
 Elizabeth Klaus Hatch & Donald Hatch Jr. Endowed Scholarship
 Nancy E. Henn Memorial Scholarship
 Samuel & Adelaide Rockwood Scholarship
 Grace Y Rose Scholarship in Education
 A Herby and Helene Tink Scholarship
 EXCEL (Extending College of Education Learning) Scholarship

Department of Kinesiology and Physical Education

Miriam Anderson Scholarship
 Lela Trager Scholarship
 Elizabeth A. Patterson Scholarship
 Margaret May Duncan Scholarship
 Physical Education Scholarship
 Lou Jean Moyer Scholarship
 Al Kranz Student Athletic Trainer Scholarship
 Judith A. Bischoff Scholarship
 Dr. M. Joan Popp Endowed Scholarship
 Stroup-Dunn Endowed Scholarship

Department of Literacy and Elementary Education

Ada Grimwood Barnard Memorial Fund
 Penelope (Penny Fike) Cameron College of Education Scholarship Fund
 Maureen McLaughlin Deveraux Scholarship Fund
 Dorothy A. (née Studnicka) and Glenn E. Erickson Scholarship Fund
 Julianna Gehant Memorial Scholarship
 Raymond M. Haas and Harriet Cords Harrington Haas Scholarship Fund
 Earl and Margaret Hoffmann Endowed Scholarship in Elementary Education
 Laurence A. Mack Memorial Scholarship Fund
 Tatum Literacy Scholarship
 James & Moke Chee Wolter Scholarship

Special and Early Education

Lawrence B. Hapeman Scholarship
 Iris Adam Memorial Endowment Fund
 Marion Elliott Scholarship Award
 James and Karen Hayman Endowed Scholarship in Education

College of Education Office of Student Services

Mary F. English Technology Award

College of Engineering and Engineering Technology

Anthony L. Manne Scholarship in Engineering Technology
 Arthur D. and Florence S. Graffam Engineering Technology Scholarship Fund
 Caterpillar Excellence Scholarship
 Caterpillar and Friends Scholarship Award
 Crane Composites Expendable Scholarship In Engineering and Engineering Technology
 Dean's Diversity Scholarship for Freshmen and Transfers
 Dennis Cesarotti Scholarship in Safety and Industrial Hygiene
 "Doc" and Betty Newell Scholarship
 Engineering and Technology Alumni Society Endowed Scholarship
 Joseph Bittorf Memorial Scholarship Fund in Industrial and Systems Engineering

Leadership Tuition Program
 Max Zar Scholarship in Engineering
 Mullick Family Scholarship in Engineering
 Navistar Innovation in Engineering Scholarship
 Navistar Scholars Fund in Engineering & Engineering Technology Scholarship
 NECA-Northeastern Illinois Chapter Scholarship in Memory of Peter Cattaneo, Sr.
 Road Builder Charities Scholarship
 Romualdas and Nijole Kasuba Scholarship

Department of Electrical Engineering

OMRON Foundation Electronic Engineering Scholarship

Department of Technology

Anthony L. Manne Endowed Scholarship in Engineering Technology
 AutomationDirect Scholarship
 Dr. Dennis Cesarotti Memorial Scholarship
 Lin Engineering Scholarship

College of Health and Human Sciences

Izzo-Inge Family Award for Students with Disabilities
 Rosebud Foundation Scholarship

School of Allied Health and Communicative Disorders

Cletus G. Fisher Award
 Joan Good Erickson Undergraduate Clinical Interest Award

School of Family, Consumer, and Nutrition Sciences

Kappa Omicron Nu Scholarship
 Celine Neptune Scholarship
 Georgiana W. Sie Memorial Fund
 Helen Gum Westlake and Donald G. Westlake Scholarship for Family Life Studies
 Early Childhood Studies Student Teaching Scholarship
 J.W. and Alice Marriott Foundation Scholarship
 Student Hospitality Administration Scholarship
 Deloris Gregory Pourchot Endowed Scholarship

Department of Military Science

Ruth Ashelford Pollock Scholarship
 Illinois State Army ROTC Tuition Waiver
 NIU Army ROTC Housing Waiver
 Army 2yr/3yr/4yr Federal ROTC Scholarship
 Army ROTC Nursing Scholarship
 Guaranteed US Army Reserve Scholarship
 Guaranteed Illinois Army National Guard Scholarship
 Children of Disabled and Deceased Veterans of the US Military Scholarship

School of Nursing and Health Studies

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
 Sarah Fuller Memorial Scholarship
 Leslie A. Holmes Memorial Fund - Endowed
 Phyllis L. Ross Memorial Endowed Scholarship
 Margaret Christiano Endowed Scholarship
 Roseanne Krcek-Frank Award Fund
 Barbara Read Walpole Scholarship
 Shirley A. Benson Scholarship
 Joe and Karen Grush Endowed Scholarship

College of Liberal Arts and Sciences

Dr. Frederick L. Kitterle Memorial Scholarship Fund
 Dr. Frederick L. Kitterle Memorial Scholarship Fund for the
 Undergraduate Research Apprenticeship Program
 Jerrold H. Zar Scholarship in Science Education

Department of Biological Sciences

Alumni Scholarship
 Sonya Conway Memorial Scholarship
 Harvey A. Feyerherm Award
 Dr. August M. Gorenz Scholarship
 Dennis Larsen Memorial Scholarship in Biology
 David R. Layman Scholarship Fund
 Norbert and Ester Mangold Scholarship
 Charles E. Montgomery Award
 David and Karen Nargis Scholarship
 Jerrold H. Zar Scholarship Award

Department of Chemistry and Biochemistry

American Chemical Society (ACS) Undergraduate Award in
 Analytical Chemistry
 American Chemical Society (ACS) Undergraduate Award in
 Inorganic Chemistry
 American Chemical Society (ACS) Undergraduate Award in
 Organic Chemistry
 American Institute of Chemists (AIC) Award
 Chemistry Alumni Undergraduate Endowed Scholarship
 Dean's Award
 Freshman Chemistry Achievement Award
 John D. Graham Endowed Scholarship
 Kevin Cull Memorial Endowed Teaching Award
 NIU Chemistry Club Edwards--Hyland Award
 NIU Chemistry Club Outstanding Undergraduate Research
 Award
 Outstanding Junior Award
 Outstanding Senior Award
 Outstanding Sophomore Award
 Rock River ACS Outstanding Undergraduate Research Award
 Rosalie Reynolds Memorial Scholarship in Chemistry
 Van Acker-Duminy-Kovarik Scholarship Fund
 William Mickols Endowed Scholarship

Department of Communication

Donald R. Grubb Scholarship Fund (NINA)
 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

Department of Computer Science

Evelyn Nelson Scholarship
 Elizabeth J. Schwantes Undergraduate Scholars Fund

Department of Economics

Skeels Scholarship in Economics

Department of English

Jeannie A. Hains 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
 Robert T. Self Award for Study in Ireland
 Orville Baker Essay Award
 Jan Kiergaard Award
 Y 1 Writes Award
 Showcase Award

Department of Foreign Languages and Literatures

Michael Morris Memorial Expendable Scholarship Fund
 Interpro Translation Solutions FLRP Study Abroad Scholarship
 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
 Jack Villmow Junior Meteorology Award for Academic
 Achievement
 Nancy C. Wick Senior Meteorology Award for Academic and
 Professional Achievement

Department of Geology and Environmental Geosciences

Casella Field Camp Fund
 Brian Fugiel Memorial Fund
 Samuel S. Goldich Fund
 Carla Montgomery Field Camp Scholarship Fund Carla
 Montgomery Undergraduate Scholarship in Geology
 Ira Edgar Odom Endowed Fund
 Malcolm P. Weiss Endowed Fund
 John R. Young Memorial Scholarship

Department of History

James R. Shirley Undergraduate Essay Prize
 J. Patrick White History Education Scholarships
 Oscar Matasar History Scholarship
 Jeannie A. Hains Scholarships
 Outstanding History Student Award
 Marvin Rosen Undergraduate Scholarship
 James Shirley Award in Asian History

Department of Mathematical Sciences

Margariete Montague Wheeler Memorial Fund
 Gail Masters Gallagher Memorial Scholarship Fund
 Donald R. Ostberg--Mathematics Memorial Fund--Endowed
 Mathematical Sciences Incoming Student Award
 Clarence Ethel Hardgrove Mathematics Scholarship Fund
 Dale G. Jungst Memorial Endowed Scholarship in Mathematics
 Education

Division of Statistics

Carol J. Feltz Memorial Scholarship

Department of Physics

Eaton-Miner Physics Teacher Education Fund

Department of Political Science

Joe R. Wilkinson Memorial Fund--Endowed
 Inez Nelson Family Endowed Scholarship
 Outstanding Undergraduate Paper Awards
 Kevin McKeough Award
 John G. and Barbara C. Peters Scholarships for Outstanding
 Public Service

Department of Psychology

A. Bond and Margaret F. Woodruff Scholarship Fund—Psychology
 Joe and Karen Grush Endowed Scholarship
 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

College of Visual and Performing Arts Endowed Scholarship Fund
 Sally Stevens Arts Scholarship
 O'Malley-Pugh Endowed Scholarship
 Rosebud Foundation Scholarship

School of Art and Design

Jonathan Ryan Lee Studio Art Scholarship
 Barbara J. Benway Scholarship in Art Education
 Audrael M. Chiricotti Scholarship Fund for Graphic Design
 Dorathea & Richard Beard Scholarship
 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
 Lester K. Smith Endowed Creative Art Scholarship Fund
 Scholarship
 Marilyn Sjöholm Student Scholarship for Fine Art
 Joyce L. Marcus Endowed Art History Scholarship Fund
 Stuart D. Fink Fine Arts Memorial Scholarship Fund (biennial)
 Antinette "Toni" Keller Expendable Scholarship Fund
 Virginia Noe Memorial Scholarship Fund

School of Music

Constance Eloise Aagesen Scholarship Fund
 Charles Baker Memorial Scholarship Fund
 Samuel E. & Bertha Glidden Bradt Memorial Fund
 Brody Family Endowed Scholarship Fund
 Paul Busija Memorial Scholarship Fund
 Clark Family Endowed Scholarship in Music
 Stuart D. Fink Fine Arts Memorial Scholarship Fund (biennial)
 Norman S. and Marion D. Gilbert Endowed Scholarship in Music and Education
 Robert R. and Frances A. Green Endowed Scholarship in Music
 Janet and A. Oscar Haugland Scholarship in Music Composition or Music Theory
 Earl and Margaret Hoffmann Endowed Student Scholarship in Music
 Jane Jenkins Lovering Memorial Scholarship Fund
 Richard A. Keefer Music Scholarship Fund
 William M. and Ruth H. Koehler Piano Scholarship Fund
 Kolze-Rasmussen Music Scholarship
 Ronald J. Modell Scholarship in Jazz Studies
 Maude Nicholson Music Scholarship Fund
 O'Malley-Pugh Endowment Fund
 Wilber Pursley Endowed Scholarship in Music
 Diane Ragains Slawin Endowed Fund in Vocal Music

Lester K. Smith Creative Music Scholarship Fund
 Wilbur and Dorothy S. Smith Clarinet Scholarship
 Alfred L. and Shirley K. Tobias Scholarship Fund
 School of Music Tuition Scholarship
 Lester Trilla Scholarship Fund
 Lynne Waldeland Scholarship in Vocal Music
 Donald Walker Living Legacy Scholarship Fund
 Reynolds Whitney Memorial Scholarship Fund
 A. Bond and Margaret F. Woodruff Scholarship Fund
 Fanny R. Wurlitzer Music Scholarship Fund
 Jerrold H. Zar Endowed Scholarship in Trumpet Studies
 Lyle & Mary Kennedy Scholarship Fund 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

Other Units**Alumni Association**

NIU Alumni Association Merit Scholarship
 O'Brien Vrbas Scholarship Trust

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

Counseling and Student Development Center

Florence E. Doyle Memorial Fund

Financial Aid

Karl L. Adams Scholarship
 Lora and Warner Pomrene Scholarship
 Gladys Brooks Beltzer Memorial Scholarship
 Maurine Bloomster Coxhead Endowed Scholarship
 Marion C. Hayes Endowed Scholarship Fund
 Irene V. Crofton Scholarship Fund
 Wayne E. McCleery Award
 Grace E. Nix Fund
 Class of 1960 Scholarship
 Mary N. 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

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 Devereaux Scholarship Fund
 Debora J. Korcek Memorial Scholarship
 Grant-in-Aid Scholarship
 Len and Anneda "Sis" Jacobson Memorial Scholarship
 John and Kathryn Groth Scholarship
 Lynne Waldeland Academic Effort Award
 Julius E. and Joycelyn Grolla Brasini Student Endowment for Athletes

International Programs

Clara Sperling Memorial Scholarship
 John and Lili La Tourette International Studies Scholarship
 International Student Opportunity Fund Scholarship

Lesbian, Gay, Bisexual, Transgender Resource Center

Joseph Harry Endowed Scholarship Program

Northern Star

Kathy Orr McDonald Memorial Award for Editorial Excellence
 Campbell-Thompson *Northern Star* Scholarship
 Ryan Byrne Memorial Award
 David Onak Scholarship
 Josephine Korcek Memorial

Office of Admissions

Transfer Residential Scholarship

Office of Precollegiate Programs

Andre D. Bohanon Scholarship

Operating Staff Council

Operating Staff Dependent Award

Office of Student Engagement & Experiential Learning

Huskie Service Scholars

Scholarship Office

Alverda A. Bastian Scholarship
 Alexa Rae Bertram Scholarship
 Anna Larson and Mary Jane Larson Baird Scholarship
 Kathleen Callahan Love for a Lifetime Scholarship
 Centennial Scholarship
 Joseph and Rose Costa Scholarship Fund
 DeKalb County Scholars Award
 Jeanette M. Doweiko Memorial Scholarship
 John Reed Dunn Memorial Endowed Scholarship
 Faculty Fund Scholarship
 February 14th Fund for the Forward, Together Forward Scholarship
 Financial Need Assistance Program
 Paul E. Gipson Scholarship
 Chief Richard Gunther Firefighters' Endowed Scholarship
 Huskie Legacy Award
 Lead NIU Scholarship
 NIU Transfer Student Scholarship
 NIU Scholars
 Northern Academic Scholarship
 Out-of-State Huskie Scholarship
 Red & Black Award
 Richard L. Taylor Scholarship

University Scholar Award
 Wheeler Memorial Endowed Scholarship
 Woodstock Center Endowment Fund
 Gail Ebers Hickey Endowed Scholarship
 Richard and Marcy Calkins Scholarship Fund for STEM Students

Student Association

Erickson-Doherty Student Leadership Travel Endowment Scholarship

Student Involvement and Leadership Development

Parents' Association Endowed Scholarship

Supportive Professional Staff Council

Supportive Professional Staff Scholarship Fund

University Honors Program

Ari and Ruth Kovacevich Scholarship
 James L. Massey Honors Scholarship
 Dick Noreen Honors Scholarship
 Michael C. Maibach
 University Honors Continuing Student Tuition Waiver
 University Honors House Leader
 University Honors Fellow

University Libraries

Katherine Walker Library Work Scholar Award

Women's Studies Program

Mothers Memorial Scholarship
 Austin Sawicki Memorial Scholarship

University Services

Holmes Student Center

The Holmes Student Center provides recreational facilities, informal gathering places, eating places, meeting and conference rooms, and an 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 for many 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. Free open wireless is available on all main floors.

Housing & Dining

Campus Living

NIU offers a range of on-campus living options for undergraduate students. Whether living in one of the five residence hall communities or in our apartment-style Northern View Community, on-campus housing provides NIU students with a supportive environment, which fosters personal growth, community connections, and academic achievement.

The university residence halls are a convenient and affordable option for undergraduate students. Residence hall rooms are furnished with a bed, desk, desk chair, dresser, and combination refrigerator/freezer/microwave; additionally, utilities are covered within the residence hall contract (including cable TV, Internet, heat, gas, water, garbage, and electricity). 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 students can access a high-speed Internet connection in their residence hall rooms. Other amenities available to hall residents include quiet study lounges, community safety centers, on-site laundry, vending machines, and photocopiers.

Residence hall contracts also include a meal plan. Residents can choose to eat in any of the dining units in the halls, including an à la carte food court, all-you-care-to-eat buffets, and grab-and-go units. 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.

A unique aspect of living in the university residence halls is the supportive academic and social environment found on each floor. Residence hall staff, including community advisors who live on each floor, help students acclimate to life at NIU. Students can also take advantage of various support resources, including in-hall tutoring centers, computer labs, and specialized programs found in Living-Learning Communities (LLCs). LLCs are specialized communities designed to strengthen the connection between students and faculty/staff within a chosen course of study or with a special interest. NIU offers the following LLCs: Business

Careers, Exploring Majors, Fine Arts, Health Professions, Honors, International, Science/Engineering/Technology, Spirituality and Meaning, Educator Licensure, and Transfer Community.

Residence hall contracts are valid for the entire academic year (August to May). Optional winter break housing is available in select halls. Summer housing, as well as summer meal plans, is also available. Applications are available online at www.niu.edu/housing/ and from the Residential Administration office, located in 101 East Neptune Hall. Housing & Dining Residential Administration can be reached at 815-753-1525 or by e-mail at housing@niu.edu.

Health Services

Health Services offers a wide variety of high quality outpatient health care services to NIU students to assist with maintaining and improving their health. Health Services physicians, 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.

Health Services is available to all full- and part-time students who have been assessed on-campus student fees. There are no charges for physician services, X-rays, most laboratory tests, 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 and Chronic Medical Care—evaluation, consultation, and treatment for a wide variety of medical concerns such as upper respiratory infections, sinusitis, cough, and urinary tract infections (UTIs), injury care, mental health, and sports medicine.

Allergy Injections—administered by a nurse using the schedule and serum provided by the student's private allergist.

Laboratory—laboratory testing ordered by Health Services, and limited testing ordered by outside health care providers.

Men's Health—screening and treatment for sexually transmitted infections and other men's health issues with an emphasis on prevention and personal responsibility.

Pharmacy—fills prescriptions from Health Services and outside health care providers, and provides several over-the-counter medications such as Plan B One-Step (emergency contraception), allergy and cold preparations, and fever/pain relievers.

Preventive Medicine—immunizations (including HPV, Hepatitis A and B, and meningitis vaccines, as well as state-required immunizations), HIV testing, travel counseling and vaccines, tuberculosis testing and treatment, seasonal flu shots, and information and counseling on communicable diseases.

Psychiatry—psychiatric assessment, medication, and/or referral is provided on a full-time basis at Health Services by the psychiatrist from the Counseling and Student Development Center.

Radiology—digital radiography including general diagnostic X-rays, sports medicine X-rays, and electrocardiography when ordered by Health Services.

Women's Health—care and treatment for women's health concerns including annual exams, breast exams, Pap smears, sexually transmitted infections, vaginal infections, menstrual irregularities, and contraception and counseling with an emphasis on education and prevention.

Online Services—To schedule or cancel an appointment, check on immunization records, order prescription refills, and receive test results visit the website at www.niu.edu/healthservices.

Appointments are encouraged; however, walk-ins are accepted and will be seen on a first-come, first-serve basis. Appointments are required for many services, including some services in Preventive Medicine. Fees are charged for missed appointments. To schedule appointments or for additional Health Services information, visit the website at www.niu.edu/healthservices or call 815-753-1311.

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 for these medical expenses. For more information regarding this insurance plan, visit the website at www.niu.edu/shi or call the Student Insurance Office at 815-753-0122.

Student Health Insurance

Students who register for 9 or more on campus semester hours by the 15th 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 who register for at least 6 semester hours on or off campus may enroll in the student insurance plan. These students must return an enrollment form to the Student Insurance Office by the 15th calendar day of the semester. Enrollment forms are available at the website: www.niu.edu/shi.

International students and students studying abroad are required to carry the NIU student insurance. These students are automatically charged the fee for student insurance if they register for at least 1 semester hour by the 15th calendar day of the semester.

Spouses, domestic partners, and children of insured students, may also be insured. The insured student may apply for dependent coverage on or before the 15th calendar day of the semester. Applications for dependent coverage are available at the website: www.niu.edu/shi.

Students who have been assessed the student insurance fee and have comparable health insurance coverage may apply for a waiver by completing the on-line Waiver Process at the Student Insurance website on or before the 15th calendar day of the semester. Students who successfully complete the waiver process are not assessed or covered by student insurance for the following spring semester.

Reinstatement to the NIU plan is available during open enrollment periods or within 60 days of being removed from alternate coverage. Please contact the Student Insurance office for more information.

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 the student insurance for themselves and their dependents during the first 5 days of summer session. Applications are available at the website: www.niu.edu/shi.

Students who withdraw from the university due to medical reasons will not receive a refund of the student insurance fee and will continue to be insured through the student health insurance plan for the remainder of the semester term. This provision is available for one academic term only.

Information concerning the NIU student health insurance may be obtained from the Student Insurance Office, Health Services, Room 201, 815-753-0122, or e-mail to studentinsurance@niu.edu.

Service Centers, Offices, and Agencies

ACCESS Tutoring Programs

ACCESS provides campus-wide academic support and tutoring to undergraduates through Peer Assisted Learning (PAL), Supplemental Instruction (SI), and the A+ Program. PAL offers free, appointment-based tutoring in most 100- and 200-level general education courses. PAL also provides walk-in tutoring centers in several residence halls and the library. SI is an enhanced tutoring program offered in specific sections of some courses. Student tutors called SI leaders attend class with students and hold regular study sessions to help students learn more effectively. The A+ Program provides individual and small group instruction in effective college reading and study strategies.

Additional programs are offered each semester. For further information, contact PAL at 815-753-0203, and SI or A+ at 815-753-1141. Visit the web for more information about all programs, courses covered, and schedules 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, in particular, the center offers a Peer Mentor Program for first-year students, designed to assist with their transition to college. The center creates an inclusive and welcoming environment that intentionally enhances students' learning experiences, leadership development, and career preparation. It also provides students with computer access, a resource library, meeting rooms, and extended hours during final examinations.

Campus Child Care

Campus Child Care offers NIU students, faculty, and staff full- and part-time child care for their children ages 3 months - 5 years. The center is accredited by the NAEYC Academy for Early Childhood Program Accreditation, and has a Gold Circle rating through the Illinois Quality Counts Quality Rating System, 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 5:30 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 815-753-0125 or visit the website at www.ccc.niu.edu/cc/ccchome.shtml.

Campus Recreation

Fee-paying NIU students on the DeKalb campus are automatically members of Campus Recreation for that semester. Campus Recreation also offers affordable memberships for students who have not paid NIU DeKalb campus fees and students' families and significant others. Current memberships with Campus Recreation include access to the Student Recreation Center, the Chick Evans Field House, Anderson and Gabel pools, and the Outdoor Recreation Sports Complex during Open Recreation hours. Within those facilities, members are able to take advantage of:

- Cardio and strength training rooms and equipment
- Exercise boxing area
- Racquetball/wallyball courts
- Multipurpose courts (basketball, volleyball, indoor tennis, badminton, floor hockey, indoor soccer, etc.)
- Indoor tracks
- Locker rooms with dry saunas
- Sports equipment check-out
- Open and lap swimming at pools
- One group cardio equipment orientation
- One group strength training session
- Nutrition consultations--healthy eating habits are critical to achieving wellness. Interns help determine calorie requirements needed to achieve an individual's weight goal and assist with food planning.
- New Hall and Gilbert Hall Fitness Centers--only open to students living in residence halls
- Outdoor basketball courts

The Outdoor Recreation Sport Complex is home to the Sport Clubs, Intramural Sports, and Open Recreation. Fee paying students have access to this state-of-the art facility, which includes:

- Natural and artificial sports fields to accommodate: softball, baseball, flag football, lacrosse, soccer, ultimate Frisbee, Quidditch.
- Other amenities include: indoor restrooms, equipment check-out, light concessions, two covered patio areas, and a lighted complex.

Campus Recreation offers numerous recreation programs and services at affordable rates:

- Group Fitness Classes--trained instructors offer over 35 classes weekly and incorporate a unique blend of strength and conditioning exercise to give participants workouts that creates results. Classes include belly dance, body combat, bosu, cycle, pilates, yoga, zumba, and more.
- Personal Training--nationally certified trainers design and implement a program to meet your needs.
- The Outdoor Adventure Center has a complete line of outdoor gear rentals such as canoes, kayaks, life-jackets, cross country skis, ice skates, tents, sleeping bags, roller blades, outdoor sport equipment, etc.
- Adventure trip leaders coordinate a variety of outdoor pursuits such as hiking, canoeing, backpacking, rock climbing, and caving.
- Sport Clubs are registered student organizations who compete in league play with other universities in sports and martial arts and include: Aikido, baseball, bass fishing, Brazilian Jiu-Jitsu, disc golf, dodgeball, equestrian, fencing, gymnastics, Hap Ki Do, ice hockey, Korean martial arts, lacrosse, powerlifting, Quidditch, racquetball, roller hockey, rugby, men's soccer, swimming, Tae Kwon Do, tennis, track and field, triathlon, ultimate Frisbee, men's volleyball, water polo, and water ski and wakeboard.
- Aquatics--swimming lessons, stroke clinics, and lifeguard certification classes are offered.

Campus Recreation employs over 250 student employees annually who are interested in providing excellent programs and customer service while learning skills that prepares them for future careers. For more information regarding employment, programs, and services please contact Campus Recreation at 815-753-0231, e-mail at CampusRecreation@niu.edu, or visit our website at www.niu.edu/campusrec/.

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. Career Services staff members also assist students in their searches for off-campus part-time and full-time employment. Visit the website at www.niu.edu/careerservices.

Besides offering individual career counseling about career and job-related needs, 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 Huskies Get Hired system utilizing Victor eRecruiting at www.gethired.niu.edu.
- Walk-in and online resume and cover letter reviews
- Career testing
- University-wide job fairs, internship fairs and the Educator Job Fair
- Fairs or expos targeting specific interests including graduate or professional schools
- Assistance in the application process for graduate/professional schools
- Assistance with self-managed credential files for students in the field of education
- A Career Resource Center containing books and other career-related materials and one of many computer labs located on campus.

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.

Counseling and Student Development Center

The Counseling and Student Development Center supports the academic, emotional, social, and cultural development of students. The student-centered programs include counseling, assessment, crisis response, outreach, consultation, training, and educational services. The center's staff help students address personal challenges and develop the skills, abilities and knowledge to empower them to take full advantage of their college experience.

An atmosphere that is welcoming for all individuals is valued and diversity of race, gender, ethnicity, age, sexual orientation, religion, socioeconomic status, citizenship, and ability is embraced. The center strives to foster and promote awareness, empathy, and cultural competence within a multicultural environment.

Services include:

- Individual and group counseling
- Crisis intervention and referral
- Substance abuse assessments
- Eating disorder assessments
- Anger interventions
- Psychiatric services
- Workshops on various topics (in residence halls, classes and other settings)
- Consultation (regarding mental health issues, programming, and organizational development)
- Training for graduate students

For more information, visit www.niu.edu/csdc, or call 815-753-1206.

Disability Resource Center

Students seeking disability related resources or wanting to learn about campus access and reasonable accommodations should contact the Disability Resource Center, located on the fourth floor of the Health Services Building. Staff of the DRC may be reached at 815-753-1303 (voice), 815-217-2243 (video phone, Room 417), or through email at drc@niu.edu. Students seeking academic accommodations should visit the DRC web site at www.niu.edu/disability to learn more.

By providing support services for students with disabilities, the university is in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments Act of 2008.

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, Linux, and Unix. The Information Technology Services (ITS) and ResTech helpdesks provide end-user support for many technologies and assistance with access to NIU's network and student systems. The ITS Contact Center provides on-campus face-to-face end-user support for all mobility technology issues including wireless (WiFi) connectivity and NIU e-mail on devices. Password assistance, Live directory and information assistance are also available for the campus and surrounding communities..

General access computing labs feature P4 2.8 GHz or faster computers, DVD-ROM/CR-RW drives, 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 laboratories feature Windows 7 office productivity software, Internet browsers, and various adaptive technologies for students with disabilities. In addition, statistical analysis packages such as SAS and SPSS are available in all locations through the academic cloud (Citrix, AnywhereLab, MyApps, etc.). Macintosh computers running OSX are available in labs that support the graphic arts programs. Volume purchasing of software extends savings to the university community.

NIUNet is Northern Illinois University's state-of-the-art network that provides students and faculty with access to advanced research and academic networks. Students use NIUNet every day through both wired and wireless network connections on all of NIU's campuses. Maintained by ITS, NIUNet is a fiber optic network providing high speed broadband connectivity to Internet2, the world's foremost advanced networking consortium. NIUNet also provides the university with general Internet connectivity to students in computer labs, residence halls, classrooms and public spaces, as well as faculty and staff offices, laboratories, and libraries.

NIU's telephone systems include standard and advanced calling features and services. Call tracing and caller ID blocking are offered for enhanced security.

For more information, call ITS 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 Affairs" section of this catalog.

Latino Resource Center

The Latino Resource Center (LRC) offers a variety of services to assist, encourage, and inspire NIU Latino 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 De Mujer a Mujer: Latina Assistance Program (LAP), Supporting Opportunities for Latinos (SOL), Mentoring for Academic Success (MAS), and Freshmen Receiving Experience and Study Habits (FRESH). The LRC also provides cultural and social 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, wireless Internet connections, library, and meeting rooms for student use. For more information, visit www.niu.edu/lrc or contact Dr. Emily Prieto, Director at 815-753-1986.

Lesbian, Gay, Bisexual, Transgender Resource Center

The Lesbian, Gay, Bisexual, Transgender (LGBT) Resource Center serves as a central resource for increasing campus and community awareness and understanding about sexual orientation and gender identity. The Resource Center provides 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, as well as their family members, friends, and allies. The center's resource room offers a relaxing place to meet people, study, research, and get connected. A lending library of books, films, and magazines on LGBT topics, computer stations for student use, and a variety of free brochures and handouts are also available.

Military Student Services

In August 2010, the Veteran's Assistance Office affiliated with Financial Aid transformed into Military Student Services (MSS); a comprehensive and single point of contact for veteran, military students, and dependents of veterans who attend Northern Illinois University. Services and resources provided by this office include, but are not limited to, the processing of federal and state veteran educational benefits, outreach to the NIU veteran and military student population, mental health case management, educational and social programmatic support, and individual and collective advocacy. These services are designed to foster a veteran-friendly campus that is welcoming and supportive of all U.S. veteran and military students. For more information about MSS visit <http://www.niu.edu/militaryservices>, call 815-753-0691, or stop by Adams Hall 408.

Off-Campus and Non-Traditional Student Services

Off-Campus and Non-Traditional Student Services at Northern Illinois University was established in order to support and enhance the educational, interpersonal, and social experiences of off-campus, commuters, transfer, and non-traditional students. The office has a lounge for students to come and relax between classes, have lunch, study, or chat with other students. The lounge space includes comfortable furniture, a microwave, a full-sized refrigerator, a television, and computers for students to use. The staff assists students in getting connected with necessary services or navigating particular issues. There is a computer lab adjacent to the office that meets students' computing needs. Off-Campus and Non-Traditional Student Services is located in the Holmes Student Center, Rooms 023J and 023K (basement level near the Orientation Office). For further information, visit the Off-Campus and Non-Traditional Student Services website at www.niu.edu/comnontrad, phone 815-753-9999, or e-mail at ocntss@niu.edu.

Office of the Ombudsperson

All members of the university community may consult the Office of the Ombudsperson for neutral and confidential assistance and advice regarding university-related concerns. The office provides assistance for any type of university matter, including academic, financial, housing, consumer, work-related, or interpersonal issues.

Members of the office staff will listen to concerns, discuss options, and offer suggestions and advice from an objective point of view that may assist in the resolution of the concern. Distinctive services of the office include clarification of university policies and procedures, advice regarding appropriate strategic approaches and specific direction, and referral to appropriate individuals and offices on campus.

As designated neutrals, staff members in the office are prohibited from advocating on behalf of any individual, but can suggest others who can serve as potential advocates if necessary. Due to the strictly confidential nature of communications with the Office of the Ombudsperson, disclosures to the office do not constitute notice to the university.

The Office of the Ombudsperson is located in the Holmes Student Center, Room 601. Services are free of charge and appointments may be made by calling 815-753-1414. Visit the office website www.niu.edu/ombud for additional information.

Office of Student Academic Success

The Office of Student Academic Success (OSAS) was created in July of 2009 as a direct result of NIU's 2008 Great Journeys Strategic Plan to bolster student persistence and success. The OSAS supports the university's mission by empowering students to achieve academic and personal goals through a comprehensive college-wide support network.

OSAS strives to:

- partner with the colleges, faculty, and fellow support service units to identify and intervene with students who exhibit at risk behaviors
- provide educational opportunities and resources for students to hone academic and soft skills
- develop mechanisms to retain students who may leave as well as to aid in the return to NIU for students who have stopped out
- help new students acclimate to Northern Illinois University
- assist students in connecting to the appropriate campus resources in a timely and personal manner

collaborate with colleges, advisors, and academic support units to develop and maintain common tools to assist students with academic planning and pacing

stay current with best practices and programs within the field of student success and retention

The OSAS staff (which includes Student Success Specialists who are assigned to each academic college) maintains collaborative relationships across campus, supports faculty objectives, and encourages student use of educational resources through the following programs and services: the Early Alert Program, MAP-Works, Midsemester Check, Destination Graduation, Soup and Success Workshops, Financial Cents, the Huskie Victors Program (formerly Leaders and Scholars), Huskie Enterprise in Leadership and Philanthropy (H.E.L.P.), faculty referrals, and individual meetings with students. For more information please contact the Office of Student Academic Success at (815) 753-5721 or visit the website at www.niu.edu/osas.

Office of Student Engagement and Experiential Learning

The Office of Student Engagement and Experiential Learning's (OSEEL) main purpose is to provide undergraduate students at NIU with opportunities to engage in active and collaborative learning. Engaged learning helps students develop vital skills such as communication strategies, critical thinking, and creativity. The OSEEL focuses on three main areas: Research, Curricular Initiatives, and Service Learning. **Research** opportunities are available through the programs: Research Rookies, Undergraduate Research Apprenticeship Program (URAP), Undergraduate Research Assistantships (URA), Undergraduate Special Opportunities in Artistry and Research (USOAR), Undergraduate Travel Scholarship (UTS), and Undergraduate Research and Artistry Day (URAD). **Curricular Initiatives** are: Themed Learning Communities (TLC), Course Transformation Project (CTP), Graduate School Preparation Seminar (GSPS), GRE Basics Workshop, and Northern Lights Ambassadors (NLA). **Service Learning** opportunities are: Huskie Service Scholars (HSS), Project on Civic Reflection (PCR), and First Generation Aspire to Succeed Together (FAST). For more information, or to apply for one of these programs, visit our website at: www.oseel.niu.edu.

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.

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 in Campus Life Building, Room 120, and can be reached by calling 815-753-1701.

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 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. There is extensive information regarding many legal issues on the website at www.niu.edu/legal.

Women's Resource Center

The Women's Resource Center is an advocate for a safe, supportive campus environment that embraces and creates equity among all voices. The Women's Resource Center educates, helps women find their voices, enriches student-learning, and provides support and resource services. Through social justice programming and advocacy work, the Women's Resource Center empowers students to create a campus culture that values women and their diverse identities. Experiential opportunities such as internships and volunteerism are offered to assist students in their engagement on campus. Facility resources such as a computer lab, Wellness & Relaxation Room, a TV lounge, and kitchen are available to students. For more information on programs or services or to find out how to get involved, visit the office located at 105 Normal Road, or call 815-753-0320.

Other Campus Human Service Agencies

The School of Family, Consumer and Nutrition Sciences **Child Development Laboratory** (CDL) (Gabel Hall, Rooms 169-170, 815-753-1150) is accredited by the National Association for the Education of Young Children and is recognized by the Illinois Quality Rating System as 4 Star, the highest level of quality. The CDL provides high quality 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 throughout the year while NIU is open. 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 **Community Counseling Training Center at NIU** (Graham Hall 416; 815-753-9312) is a counseling and training clinic, providing free counseling services to individuals and families of NIU and the surrounding communities. Counselors are advanced graduate counseling students under supervision of the NIU Counseling Faculty, who are Licensed Clinical Professional Counselors and Certified School Counselors. Counseling involves supporting clients in personal growth and the resolution of emotional challenges, as well as with academic and career concerns. Services provided include individual counseling, play therapy, couple and family counseling, group counseling, and psychoeducational and career testing.

The **Couple and Family Therapy Clinic** (Wirtz Hall, Room 146, 815-753-1684) 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, 815-753-0591) offers a wide variety of psychological evaluation and psychotherapy for individuals, couples, and families. Clients range in age from young children to older adults. Therapy is free of charge to full-time NIU students. NIU students pay a reduced flat rate for psychological evaluations. A sliding fee scale for therapy and evaluations 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** (Family Health, Wellness and Literacy Center, 3100 Sycamore Road, 815-753-1481, TTY 815-752-2000) 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 School of Allied Health and Communicative Disorders.

Other Services

Campus Transportation

NIU maintains the largest student-run university bus system in Illinois. The 15-route system, governed by the Student Association Mass Transit Board and the Director of Mass Transit, provides free transportation to all fee-paying students to campus, and inexpensive transportation for the DeKalb community. The Huskie buses are in operations seven days a week while school is in session during the fall and spring semesters, and for limited hours during winter and spring breaks, as well as during the summer session. 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 815-753-0483.

On Fridays and Sundays, the Student Association also runs a shuttle running to and from the Elburn Train Station. This enables many students to take public transportation back to their homes and visit their families, and allows them to return easily as well. For more information about the Elburn Shuttle Routes call the ticket office at 815-753-3146.

In conjunction with the University Police, the Mass Transit Board oversees the Late Night Ride Service, which provides safe passage for students to their DeKalb-area homes. The service operates seven nights a week from 10 p.m. to 6 a.m. and can be reached at 815-753-2222.

Through the Mass Transit Board and the Disability Resource Center, the NIU Student Association operates the FREEDOMMOBILE, which provides transportation around the campus and vicinity for students with disabilities. During the winter months class-to-class transportation is available for students with a qualifying disability. For more information, call the Disability Resource Center at 815-753-1303.

Orientation and Registration

An orientation program is required of all new undergraduate students (freshman, transfer, and postbaccalaureate) enrolling in on-campus courses. These programs introduce students and family members to university programs, services, and facilities and describe some of the varied aspects of college life. Academic advising and registration information are included as part of the program.

Off-Campus Students. New undergraduate students (transfers and post-baccalaureate) who will enroll only in off-campus courses are not required to attend an orientation session, but academic advising is required prior to course registration.

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 collaboration with regional community colleges, offers bachelor's degree completion programs in high-impact disciplines such as applied management in public safety and computer science, business administration, education, health and human sciences, industrial technology, and nursing. Degree-completion opportunities are designed to articulate with A.A., A.S., and A.A.S. degrees. Affordable off-campus classes are offered evenings and weekends at NIU Outreach Centers in Hoffman Estates, Naperville, and Rockford; on the campuses of partner community colleges; and online; providing flexible options for working adults, regardless of where they earned previous college credit. Northern Illinois University has formal partnership agreements with the College of DuPage, the College of Lake County, Elgin Community College, Harper College, Rock Valley College, and Waubesa 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 DuPage, Harper, Elgin, Joliet, Oakton, Rock Valley, and Waubesa.

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 NIU Outreach 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 Field 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

Denise D. Schoenbachler, Ph.D., dean
Beth Towell, Ph.D., associate dean
Paul R. Prabhaker, Ph.D., associate dean
David R. 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.

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
 B.S. in business administration

Department of Marketing
 B.S. in marketing

Department of Operations Management and Information Systems
 B.S. in operations and information management

College Mission Statement

Create innovative academic and business experiences through partnerships among students, faculty, staff, alumni, and the business community.

College Learning Goals and Objectives

College of Business undergraduates are expected to achieve the following learning goals and objectives.

Our graduates will be effective business communicators.

- College of Business graduates will be able to create common business documents.
- College of Business graduates will be able to deliver a business presentation using the appropriate technology.
- College of Business graduates will be able to analyze business situations and respond with the appropriate channel, form, content, and format.

Our graduates will demonstrate business ethical awareness.

- College of Business graduates will be able to identify ethical issues, decision alternatives and the consequences of those alternatives, including the impact on stakeholders in business decision making.

Our graduates will demonstrate problem solving skills.

- College of Business graduates will be able to identify a wide array of business problems and their interdependencies.

- College of Business graduates will be able to analyze situations and identify relevant factors that contribute to business problems by using appropriate quantitative and qualitative tools.
- College of Business graduates will be able to generate a range of alternative solutions, analyze their feasibility and effectiveness, and recommend the optimal solution.
- College of Business graduates will be able to develop action plans to implement the recommended solutions.

Our graduates will demonstrate common business knowledge.

- College of Business graduates will be able to apply the theory of the management and control of money-related operations within a business.
- College of Business graduates will be able to apply the theory and practice of the functions of Management.
- College of Business graduates will be able to describe the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create and keep customers.
- College of Business graduates will be able to apply fundamental theory and manage processes to transform inputs into outputs for creating greater customer value.
- College of Business graduates will be able to apply cross-functional concepts among the principles of business through the use of interdisciplinary exercises.
- College of Business graduates will be able to identify the role and impact of information technology on organizations to support competitive advantage.

Career Compass

Career Compass is a non-credit program required of all incoming freshmen who are pursuing a major in business or who intend to pursue a major in business. During the freshman and sophomore years, students will complete an assessment of their interests, abilities, and motivators, and based on this assessment, the program will help students select a specific business major and ultimately a successful career that best matches their personal characteristics. Students will also be provided an introduction to internship and job search skills during the sophomore year.

Passport to the Business World

Passport is a non-credit program following the completion of the Career Compass program and is required for all sophomore, junior, and senior students who are pursuing a major in business. Passport helps students become aware of the variety of co-curricular options the College of Business has to offer outside the classroom as well as course electives that particularly strengthen the likelihood of a student's eventual success in the "real world." Before graduation, students are required to participate in activities in each of these areas: Business Communications, Career Development, Ethics, Experiential Learning, Global, Leadership, and Service.

Limited Retention Requirements

All business majors must complete UBUS 310 in the first semester in which they enroll in 300- or 400-level business courses. Prerequisites for UBUS 310 are: a grade of C or better in each of the 100- and 200-level courses in the Business Core;

having satisfactorily completed UBUS 100: A, B, C, and D¹ having a 2.75 or better cumulative GPA; and having junior standing. To continue as a business major, students must earn a C or better in UBUS 310. UBUS 311 and OMIS 351² must be completed no later than the semester or term immediately following completion of UBUS 310. Additional retention requirements for each major can be found under Department Requirements.

Additional Requirements

The major portion of the professional business courses must be taken during the junior and senior years.

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.

100- and 200-Level Courses

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)
 *PSYC 102 - Introduction to Psychology (3)
 OMIS 259 - Introduction to Business Information Systems (3)
 UBUS 100¹ - Career Compass: A, B, C, and D (0)
 UBUS 200 - Passport Introduction (0)
 UBUS 201 - Passport Culmination (0)
 UBUS 223 - Introduction to Business Statistics (3)

300- and 400-Level Courses

UBUS 310 - Business Core: Lecture (9)
 UBUS 311 - Business Core: Applications Seminar (3)
 OMIS 351 - Information Systems in Organizations (3),
 OR ACCY 310A² - Accounting Information Systems (3) and
 ACCY 310S² - Accounting Information
 Systems Laboratory (1)
 MGMT 468 - Strategic Management (3)

Minor in Business Administration (36-41)

The minor in business administration is available only to NIU non-business students in good academic standing. Students should declare the business administration minor as early in the semester as possible.

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)
 ILAS 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).³

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.

* Available for general education credit.

¹ This course is optional for transfer students with 45 or more credit hours.

² Accountancy students are required to take ACCY 310A and ACCY 310S.

³ Prerequisites for all upper-division courses must be met prior to enrollment.

Dean's List Criteria

Through the Dean's List, the College of Business 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.

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)

100. CAREER COMPASS (0). A career exploration program for freshmen and sophomores who have indicated a desire to pursue a major in the College of Business. Based on an assessment of a student's interests, skills, and motivators, students explore the business majors and career paths that best fit their business self. Completion of the program will be required for students to be eligible to enroll in UBUS 310. This course is optional for transfer students with 45 or more credit hours. S/U grading.

101. BUSINESS DISCIPLINES AND ISSUES (1-3). 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. May be repeated to a maximum of 6 semester hours when topics vary. Not available for credit for upper-division business majors.

200. PASSPORT INTRODUCTION (0). Introduction of the Passport program to students at the end of their sophomore year or beginning of their junior years. The Passport program helps students identify experiences that are important to be successful in today's business world. Explanation of the requirements of the program for business students and the reporting process. To be taken before or concurrent with UBUS 310. S/U grading.

201. PASSPORT CULMINATION (0). Involves an individual meeting with an adviser to confirm successful completion of the Passport program introduced in UBUS 200. Satisfactory completion of UBUS 201 is a graduation requirement for all business majors. S/U grading.

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: Grade of C or better in MATH 210 or MATH 211 or MATH 229 or consent of college.

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: A grade of C or better in each of the following: ACCY 206, ACCY 207, ECON 260, ECON 261, ENGL 104 or ENGL 105, MATH 211 or MATH 229, MGMT 217, PSYC 102, OMIS 259, and UBUS 223; satisfactory completion of UBUS 100; a cumulative GPA of at least 2.75; and junior standing. CRQ: UBUS 200.

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.

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.

490. TOPICS IN BUSINESS (1-3). 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. PRQ: Consent of college. CRQ: UBUS 311; or FINA 320, MGMT 333, MKTG 310, and OMIS 338.

499. 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.

¹ This course is optional for transfer students with 45 or more credit hours.

Department of Accountancy (ACCY)

The Department of Accountancy offers a B.S. degree which prepares its graduates for professional accounting positions in industry, public accounting, government, and not-for-profit organizations, and or for graduate study. The program provides students with a foundation in all primary areas of the accounting discipline including cost management, financial accounting, accounting information systems, assurance services, and federal income taxes. Students are also provided with the opportunity to develop their communication, technology, and team-building skills; apply their knowledge to structured problems; and develop an understanding of ethical issues and professional conduct in business.

Accountancy Learning Goals and Objectives

Graduates of the Bachelor of Science in Accountancy program are expected to achieve these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

The NIU Bachelor of Science in Accountancy program provides essential study in accounting to prepare students at a level appropriate for entrance into the profession or graduate study.

1. Our graduates will be technically competent accounting professionals.

Our students will demonstrate an understanding of financial accounting, accounting information systems, cost management, assurance services, and taxation concepts appropriate for entrance into the profession or graduate study.

2. Our graduates will be effective problem-solvers.

Our students will:

- utilize analytic skills to identify accounting problems, generate appropriate solutions, and make informed decisions.
- apply technology tools to assist with problem solving.

3. Our graduates will be effective communicators.

Our students will:

- communicate in a professional manner.
- demonstrate effective teamwork skills.
- exhibit professional business conduct.

4. Our graduates will be ethical accounting professionals.

Our students will demonstrate an understanding of relevant professional standards and codes of conduct.

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 (one-credit upper-level ACCY courses are exempted from this policy). 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.

To graduate as an accountancy 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 ACCY courses, and all electives required for the major.

Major in Accountancy (B.S.)

Business Core (45-50)

Requirements in Departments (26)

ACCY 320 - Intermediate Cost Management (3)

ACCY 331 - Financial Reporting I (3)

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)

ACCY 470 - Accounting Career Skills Seminar (1)

Two of the following (6)

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 467 - Auditing of Accounting Information Systems (3)

ACCY 480 - Governmental and Not-For-Profit Accounting (3)

ACCY 490 - Current Topics in Accountancy (3)

One of the following (3)

ACCY 421¹ - Advanced Cost Management (3)

ACCY 433¹ - Financial Reporting III (3)

ACCY 439¹ - Contemporary Issues in Financial Accounting (3)

ACCY 462¹ - Internal Auditing (3)

ACCY 465¹ - Forensic Accounting/Fraud Examination (3)

ACCY 467¹ - Auditing of Accounting Information Systems (3)

ACCY 472 - Independent Study in Accountancy (3)

ACCY 473 - Internship in Accountancy (3)

ACCY 480¹ - Governmental and Not-For-Profit Accounting (3)

ACCY 490¹ - Current Topics in Accountancy (3)

ACCY 499 - Honors Directed Research in Accountancy (3)

Requirements outside Department (6)

FINA 410 - Financial Markets and Investments (3)

MGMT 346 - Business Communication (3)

A student may not count more than 36 semester hours of accountancy toward the 120-semester hour baccalaureate requirement.

Total Hours for a Major in Accountancy: 77-82

¹ If not used to fulfill requirement above.

Internships in Accountancy

The internship (ACCY 473) consists of full-time 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 IIAs 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). Introduction to financial accounting as a means for recording transactions and preparing financial statements for external reporting purposes. Examines the nature of accounting, basic accounting concepts, financial statements, accrual basis of accounting, the accounting cycle, and internal control. Topics include corporate accounting for assets, liabilities and stockholders' equity, and the corporate income statement. Emphasis on usefulness of accounting information for business decision making. Not open to students with credit in ACCY 288. PRQ: Completion of 24 or more semester hours of course work and a grade of C or better in OMIS 259 or equivalent.

207. INTRODUCTORY COST MANAGEMENT (3). Introduction to the study of the information required for decision making 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 cost-volume-profit analysis, standard costing, budgeting, job order costing, activity based costing, and process costing. PRQ: ACCY 206 or equivalent.

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). Study of managers' use of accounting information for decision making. Topics include budgeting, forecasting, cost estimation, cost allocation, cost-volume-profit analysis, product pricing, income statement analysis, performance measurement, and non-routine 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). Study 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, including internal controls, databases, and other information technologies through a case study approach. 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). Development of skills and techniques necessary to identify, collect, analyze and report accounting information are stressed through applied projects. 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). Study of managers' use of accounting information for decision making in manufacturing and service organizations. Topics include budgeting, cost estimation, cost allocation, cost-volume-profit analysis, non-routine decision making, transfer pricing, performance measurement, and the use of Excel for modeling business decisions. PRQ: Acceptable score on the Accountancy Qualifying Examination or consent of department. CRQ: UBUS 310 and ACCY 310A.

331. FINANCIAL REPORTING I (3). Study of financial accounting and reporting issues, including the conceptual framework, balance sheet and income statement preparation, revenue recognition, time value of money, monetary assets, inventories, plant assets, current liabilities, and long-term debt. Employ authoritative sources in researching accounting issues. Must be taken concurrently with UBUS 311. PRQ: ACCY 310A with a grade of C or better. CRQ: UBUS 310.

360. ASSURANCE SERVICES (3). Study of assurance services, including auditing and attestation. Emphasis on underlying concepts, standards, and procedures associated with assurance services, including engagement planning, risk assessment, internal control testing, evidence gathering and documentation, and communication of findings. PRQ: ACCY 310A with a grade of C or better and ACCY 320 with a grade of C or better. 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, networking, 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). Study of advanced topics related to managers' use of accounting information for management planning and control systems. Topics include advanced costing techniques, division performance measurement, customer profitability analysis, incentive systems, and other contemporary cost management issues. 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 and reporting issues, including accounting for income taxes, pension and other benefit plans, leases, earnings per share, accounting changes, stockholders' equity, investments, and statement of cash flows. Employ authoritative sources in researching accounting issues. PRQ: ACCY 331 with a grade of C or better.

433. FINANCIAL REPORTING III (3). Study of financial accounting and reporting issues, including accounting for business combinations consolidated financial statements, conversion of foreign financial statements, foreign currency denominated transactions, and derivatives and hedging activities. Employ authoritative sources in researching accounting issues. PRQ: ACCY 432 with a grade of C or better and MGMT 346.

439. CONTEMPORARY ISSUES IN FINANCIAL ACCOUNTING (3). Study of select topics in financial accounting and reporting to supplement knowledge attained in required financial reporting courses. PRQ: ACCY 432 with a grade of C or better and MGMT 346.

450. TAXATION OF BUSINESS ENTITIES AND INDIVIDUALS (3). Study of basic concepts of federal income taxation related to business entities and individuals. Includes the study of property transactions. 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). Study of internal audit objectives, processes and reporting. Topics include internal audit standards, internal controls, risk assessment, risk-based audit procedures, documentation, and communications. Employ authoritative sources to examine ethical issues, emerging issues, and industry specific issues. PRQ: ACCY 360 with a grade of C or better and MGMT 346.

465. FORENSIC ACCOUNTING/FRAUD EXAMINATION (3). Study of fraud detection and control from the perspective of public, internal, and private accountants. Topics include 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, and ACCY 360 with a grade of C or better, and MGMT 346.

467. AUDITING OF ACCOUNTING INFORMATION SYSTEMS (3). Study of the auditing of computer-based accounting information systems with a focus on control and security. Topics include information technology as it relates to assurance services, internal control assessments, and evidence-gathering activities. A student may not receive credit for both ACCY 467 and ACCY 667. PRQ: ACCY 360 with a grade of C or better and MGMT 346, or consent of department.

470. ACCOUNTING CAREER SKILLS SEMINAR (1). Continuation of ACCY 370. Study of interpersonal skills necessary for a successful accounting career. Explores a variety of situations that accounting professionals experience in their careers and discusses the necessary skills and appropriate behaviors in those situations. PRQ: ACCY 370 and MGMT 346.

472. INDEPENDENT STUDY IN ACCOUNTANCY (1-3). Individually arranged study of an accounting topic or topics that are not part of our regular course offerings. May be repeated to a maximum of 3 semester hours. PRQ: ACCY 331 with a grade of B or better and ACCY 360 with a grade of B or better and MGMT 346 and subject to a faculty member's discretion and availability and consent of department.

473. INTERNSHIP IN ACCOUNTANCY (3). Full-time work for at least 10 weeks in the accountancy/financial function of a sponsoring organization. Students submit periodic reports and deliver an oral presentation to the Department of Accountancy internship coordinator for grading. May be repeated to a maximum of 6 semester hours. PRQ: ACCY 310A and ACCY 310S and ACCY 320 and ACCY 331 and ACCY 360 and ACCY 370 and MGMT 346, and junior standing, and consent of department.

475. C.P.A. PROBLEMS I (3). Study of accounting principles and practices for issuers, nonissuers, and governmental entities. Discussion of related theory and completion of relevant, complex problems. Computer-based practice in the solution of typical problems encountered in the C.P.A. exam. May not be used as an accountancy elective. PRQ: Consent of department.

476. C.P.A. PROBLEMS II (3). Study of auditing principles and practices for issuers, nonissuers, and governmental entities. Discussion of related theory and completion of relevant, complex problems. Computer-based practice in the solution of typical problems encountered in the C.P.A. exam. May not be used as an accountancy elective. PRQ: Consent of department.

480. GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING (3). Study of state and local government accounting; not-for-profit organization accounting including tax issues and industry specific issues in healthcare and colleges and universities; Government Auditing Standards and the Single Audit Act; and federal government accounting. PRQ: ACCY 331 with a grade of C or better and MGMT 346.

490. CURRENT TOPICS IN ACCOUNTANCY (1-3). Study of new developments in accountancy including current topics and issues. May be repeated to a maximum of 6 semester hours when topics vary. PRQ: Consent of department.

499. HONORS DIRECTED RESEARCH IN ACCOUNTANCY (3). Open only to students participating in the University Honors Program. Individually arranged research in an accountancy topic of the student's selection which must be approved by the student's Honors adviser, the faculty member supervising the research, 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, Distinguished Teaching Professor, chair, Crowe Horwath Professor of Accountancy

Meghann A. Cefaratti, Ph.D., Virginia Tech, assistant professor

Natalie T. Churyk, C.P.A., Ph.D., University of South Carolina, professor, Caterpillar Professor of Accountancy

B. Douglas Clinton, C.P.A., Ph.D., University of Texas at Arlington, professor, Alta Via Consulting Professor of Management Accountancy

Bradrick M. Cripe, C.P.A., Ph.D., University of Nebraska at Lincoln, associate professor

Ann C. Dzurainin, C.P.A., Ph.D., University of Florida, assistant professor

Chih-Chen Lee, C.P.A., Ph.D., Southern Illinois University at Carbondale, professor, HSBC Professor of Accountancy

Katrina L. Mantzke, C.P.A., Ph.D., University of Wisconsin, associate professor, Kieso Professor of Accountancy

Linda Matuszewski, C.P.A., Ph.D., University of Cincinnati, associate professor

Mark E. Riley, C.P.A., Ph.D., Texas Tech University, associate professor

Rebecca T. Shortridge, C.P.A., Ph.D., Michigan State University, professor, Gaylen and Joanne Larson Professor of Accountancy

David H. Sinason, C.F.E., C.F.S.A., C.I.A., C.P.A., Ph.D., Florida State University, professor, PricewaterhouseCoopers Professor of Accountancy

Pamela A. Smith, C.P.A., Ph.D., University of North Texas, Presidential Teaching Professor, Board of Trustees Professor, KPMG Professor of Accountancy

Donald Tidrick, C.I.A., C.M.A., C.P.A., Ph.D., Ohio State University, professor, Deloitte Professor of Accountancy

Tammy Waymire, C.P.A., Ph.D., University of Arkansas, associate professor

Tim West, C.P.A., Ph.D., University of Tennessee, associate professor, Grant Thornton Professor of Accountancy

S. Carol Yu, C.P.A., Ph.D., University of Houston, associate professor

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 finance core 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.

Finance Learning Goals and Objectives

Graduates of the Bachelor of Science in Finance program are expected to achieve these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

1. The graduate must be able to list and distinguish the functional areas of finance.

In order to be a successful financial professional one must understand the role that one's particular analysis plays in the broader agenda of the finance department of a corporation, bank, or other institution. Successful demonstration of this student learning outcome would indicate that the graduate is aware of the implications and the contributions of each of the functional areas to the achievement of the overarching goals of the unit within which the graduate will be working.

2. The graduate must be able to apply analytical tools to solve problems.

Many of the tasks that must be performed by the financial manager, even the routine tasks, can be complex. It is therefore important that the graduate be able to decompose a problem into its constituent parts and understand the implications of the interplay among these constituents in order to provide a solution to a particular question or to establish a systematic policy that can be applied in various similar situations.

3. The graduate must be able to apply statistical tools to solve problems.

The concept of risk is fundamental to every functional area of the discipline of finance. The idea of risk, in turn, is inextricable from the mathematical concept of probability; with which the discipline of statistics is concerned. It is therefore imperative that every graduate from the finance program have a firm grasp of statistics, and is able to apply the tools and analyses from statistics to problems related to finance.

4. The graduate must understand and be able to apply accounting skills.

The discipline of finance originated as a subset of the field of accountancy. One could even say that in large part finance is the application of economic theory to accounting data. Very commonly the financial manager is using, as the basic fodder for his analyses, the output of accounting processes. Thus, it is important that every graduate acquire basic accounting skills and understand from whence the accounting data she is using is derived.

5. The graduate must be able to use appropriate technology.

The practice of modern business, in general, and finance in particular requires that the student be competent with several technological implements. Primary among the tools that graduates must master is the financial calculator. The students must also be familiar with spreadsheet, presentation, and word processing applications.

6. The graduate must demonstrate adequate written and oral communication skills.

Acquiring the skills necessary to perform advanced statistical and analytical analysis of a financial nature would be virtually useless if one were unable to communicate the results of such analysis to others. Thus it is necessary that graduates are able to adequately communicate in writing and with the spoken word.

7. The graduate must demonstrate good interpersonal skills.

In addition to acquiring skills specific to the practice of financial management and oral and written communication is important that graduates are able to work with others in an appropriate manner.

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, FINA 350, and FINA 395) 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, FINA 350, and FINA 395).

To graduate as a finance major or minor, a student must earn a grade of at least a C in each course required in the major or minor, which includes courses in the business core (for the major), required FINA courses, and all electives required for the major or minor.

Major in Finance (B.S.)

Business Core (45-50)

Requirements in Department (19)

FINA 330 - Corporate Finance (3)
 FINA 340 - Investments (3)
 FINA 350 - Financial Markets and Institutions (3)
 FINA 395 - Career Planning in Finance (1)
 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: 70-75

Recommendations

The finance core should be completed by the end 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)
 And 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)

Certificate of Undergraduate Study

Finance (9)

This certificate is designed for non-finance business majors to study intermediate-level finance topics. Building on the basic finance concepts introduced in UBUS 310, this certificate will provide students with more in-depth coverage of the three major areas of finance: Investment, Corporate Finance, and Financial Markets and Institutions. This certificate is designed to help non-finance majors to incorporate financial perspectives in their decision making and to understand the impact of evolving financial markets on corporations.

Admission to the certificate program is competitive based on GPA and is consistent with the limited admission standards for the finance major and minor. To earn the certificate, students must have a grade of C or above for each required course. All certificate courses must be completed within four academic years. No transfer credits may be applied toward the certificate.

Interested students should apply no later than the beginning of their final semester prior to graduation. Applications are available in the Department of Finance.

Requirements (9):

FINA 330 - Corporate Finance (3)
 FINA 340 - Investments (3)
 FINA 350 - Financial Markets and Institutions (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 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: A grade of C or better in ACCY 306, and a grade of C or better in FINA 320 or UBUS 310.

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: A grade of C or better in ACCY 306, and a grade of C or better in FINA 320 or UBUS 310.

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: A grade of C or better in ACCY 306, and a grade of C or better in FINA 320 or UBUS 310.

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. PRQ: UBUS 310 with a grade of at least C and admission into the major.

410. 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 for all business majors; ACCY 306 for business administration majors, and MGMT majors, and MKTG majors, and OMIS majors. CRQ: ACCY 331 for ACCY majors.

430. TREASURY AND CREDIT MANAGEMENT (3). Gives students an understanding of the issues and problems that pertain to the treasury and credit functions of a corporation. The focus of the course is to recognize and apply financial concepts and quantitative techniques to solve short-term financial problems. Among the topics to be covered are collection, cash concentration, disbursement management, forecasting cash flows, credit management, and international cash management. A secondary objective of this course is to prepare students for the Certified Treasury Professional (CTP). PRQ: Satisfactory completion of the finance core¹ 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.

¹ The finance core consists of FINA 330, FINA 340, FINA 350, and FINA 395.

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 ACCY 306, or FINA 410 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 (1-3). 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

Dennis Dean, interim chair
 Diane S. Docking, C.P.A., Ph.D., University of Kansas, associate professor
 Gerald R. Jensen, Ph.D., University of Nebraska, Lincoln, Board of Trustees Professor
 James M. Johnson, Ph.D., Ohio State University, Presidential Teaching Professor
 Leonard L. Lundstrum, Ph.D., Indiana University, associate professor
 Gina K. Nicolosi, Ph.D., University of Cincinnati, associate professor
 Sukesh Patro, Ph.D., University of Pittsburgh, associate professor
 Adam S. Yore, Ph.D., Drexel University, assistant professor
 Lei Zhou, Ph.D., University of Florida, associate professor

¹ The finance core consists of FINA 330, FINA 340, FINA 350, and FINA 395.

Department of Management (MGMT)

The Department of Management offers B.S. degrees in management and in business administration; minors in business innovation and entrepreneurship; and an undergraduate certificate in social entrepreneurship.

Major in Management (B.S.)

Students pursuing the B.S. degree in management select one of two emphases: leadership and management or human resource management. Students in the leadership and management emphasis are prepared for management trainee, supervisory, or other management positions in a variety of commercial enterprises. This emphasis also enhances students' preparation for entrepreneurial and consulting endeavors. Students in the human resource management emphasis are prepared for entry-level positions as human resource generalists or specialists in a variety of firms.

Management Learning Goals and Objectives

Graduates of the Bachelor of Science in Management program are expected to demonstrate these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

Graduates of our program will demonstrate the following:

1. **Problem-Solving Competencies**
 - Effectively carries out all steps of decision-making process
 - Applies management principles throughout process
 - Recognizes and thoughtfully considers ethical implications when making management decisions
2. **Relationship Building Competencies**
 - Participates actively in team projects and positively influences team outcomes
 - Builds effective relationships with peers, mentors, and business partners
 - Proactively manages interpersonal conflict
 - Respects and leverages diversity in backgrounds and perspectives
3. **Communication Competencies**
 - Produces professional business documents
 - Delivers professional presentations
 - Appropriately seeks and utilizes feedback for improvement
4. **Career and Self-Leadership Competencies**
 - Develops and acts upon a long-term career vision
 - Understands and leverages professional strengths
 - Understands and overcomes professional weaknesses
 - Actively seeks out opportunities to build professional expertise
 - Demonstrates professionalism in interaction with others

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.

Business Core (45-50)

Emphasis 1. Leadership and Management

Requirements in Department (25)

MGMT 335 - Organizational Behavior (3)
 MGMT 346 - Business Communication (3)
 MGMT 355 - Human Resource Management (3)
 MGMT 395 - Career Planning in Management (1)
 MGMT 417 - Leading and Managing Change (3)
 MGMT 447 - Leadership (3)
 MGMT 457 - Managerial Decision Making and Negotiation (3)
 MGMT 477 - Managing Organizations in Competitive Environments (3)
 One of the following (3)
 ACCY 306 - Financial Accounting Information for Business Decisions (3)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 460 - Human Resource Management and Leadership Consulting (3)
 MGMT 487 - Multinational Management (3)
 MKTG 443 - Research Methods (3)
 OMIS 352 - Managing Projects in Business (3)

Total Hours for Emphasis 1, Leadership and Management: 70-75

Emphasis 2. Human Resource Management

Requirements in Department (25)

MGMT 335 - Organizational Behavior (3)
 MGMT 346 - Business Communication (3)
 MGMT 355 - Human Resource Management (3)
 MGMT 395 - Career Planning in Management (1)
 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 456 - Practicum in Human Resource Management (3)
 MGMT 460 - Human Resource Management and Leadership Consulting (3)
 PSYC 471 - Industrial-Organizational Psychology (3)
 TECH 402 - Industrial Training and Evaluation (3)

Total Hours for Emphasis 2, Human Resource Management: 70-75

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.

Business Administration Learning Goals and Objectives

Graduates of the Bachelor of Science in Business Administration program are expected to achieve these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

The Business Administration program prepares graduates for a variety of entry-level positions in both the private and public business sectors. It is a generalist degree unlike other majors in the College of Business. Graduates of the Business Administration program are expected to demonstrate:

1. the ability to solve practical business problems.
2. the ability to identify and describe relationships among the primary business functional areas.
3. mastery of oral, written and verbal communication skills.
4. mastery of computer applications used in business environment.
5. awareness of ethical issues in business organizations.

Business Core (45-50)

Other Requirements in the College of Business (31)

ACCY 306 - Financial Accounting Information for Business Decisions (3)
 ACCY 307 - Managerial Accounting Information for Decisions and Control (3)
 BADM 395 - Career Planning in Business Administration (1)
 FINA 410 - 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)
 Two of the following (6)
 OMIS 352 - Managing Projects in Business (3)
 OMIS 442 - Process and Quality Improvement (3)
 OMIS 450 - Service Operations (3)
 OMIS 452 - Database Management for Business (3)

Total Hours for a Major in Business Administration: 76-81

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 course required in the major including courses in the business core. Business administration majors may repeat a maximum of two 300- or 400-level business courses.

Minor in Business Innovation and Entrepreneurship

The minor in business innovation and entrepreneurship is available to NIU undergraduate students in good academic standing. Students with a major in Management may take a minor in business innovation and entrepreneurship. Retention in the business innovation and entrepreneurship minor requires a C

or better in all courses in the minor. Enrollment in MGMT 427 is competitive based on the student's overall GPA.

Students must complete an application for the business innovation and entrepreneurship minor by the semester deadline. Applications and deadline dates are available in the Department of Management.

Requirements (15-24)

ACCY 288¹ - Fundamentals of Accounting (3),
 OR ACCY 206 - Introductory Financial Accounting (3) and
 ACCY 207 - Introductory Cost Management (3)
 MGMT 320 - Foundations of Business and Entrepreneurship¹ (3),
 OR UBUS 310 - Business Core: Lecture (9)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 427 - Entrepreneurship and Business Models (3)
 MGMT 437 - Entrepreneurship (3)
 One of the Following (3)
 ACCY 306 - Financial Accounting Information for Business Decisions (3)
 ACCY 307 - Managerial Accounting Information for Decisions and Control (3)
 ACCY 309 - A Survey of Income Taxes (3)
 FINA 320 - Principles of Finance¹ (3)
 MGMT 333 - Principles of Management¹ (3)
 MGMT 335 - Organizational Behavior (3)
 MGMT 447 - Leadership (3)
 MGMT 457 - Managerial Decision Making and Negotiation (3)
 MKTG 310 - Principles of Marketing¹ (3)
 MKTG 325 - Buyer Behavior (3)
 MKTG 365 - Principles of Retailing (3)
 MKTG 425 - Services Marketing (3)
 OMIS 338 - Principles of Operations Management¹ (3)
 OMIS 450 - Service Operations (3)

Minor in Social Entrepreneurship (21-30)

The minor will help students develop the entrepreneurial skills related to the unique features of building and sustaining ventures to generate economic, social, and environmental change. This minor in social entrepreneurship is available to NIU undergraduate students in good academic standing. Students with a major in management may take a minor in social entrepreneurship. Retention in the social entrepreneurship minor is based on a grade of C or better in all courses in the minor.

Students must complete an application for the social entrepreneurship minor. Applications and deadline dates are available in the Department of Management.

Requirements

ACCY 288¹ - Fundamentals of Accounting (3),
 OR ACCY 206 - Introductory Financial Accounting (3) and
 ACCY 207 - Introductory Cost Management (3)
 MGMT 311 - Social Entrepreneurship (3)
 MGMT 320¹ - Foundations of Business and Entrepreneurship (3),
 OR UBUS 310 - Business Core: Lecture (9)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 411 - Entrepreneurship in Microfinance Organizations (3),
 OR MGMT 421 - Global Social Venture Consulting (3)
 MGMT 431 - Social Venture Competition (3)
 One of the Following (3)
 ACCY 480 - Governmental and Not-For-Profit Accounting (3)
 BKST 219 - Introduction to African Studies (3)
 CLCE 410 - Nonprofits and Community Engagement (3)
 ECON 386 - Environmental Economics (3)
 ENVS 303 - Environment in the Social Sciences and Humanities (3)
 ENVS 304 - Environment Law, Policy & Economics (3)
 ENVS 450 - Issues in Environmental Studies (3)
 MGMT 335 - Organizational Behavior (3)
 MKTG 350 - Principles of Selling (3)
 MKTG 443 - Marketing Research (3)
 PSPA 326X/POLS 326 - Nonprofit Management (3)

¹ Course not open to College of Business majors.

PSPA 328/POLS 328X - Role of Nongovernmental Organizations in Development (3)
 PSPA 401 - Philanthropy and Volunteerism (3)
 PSPA 402/MGMT 402X - Resource Strategies for Nonprofit Organizations (3)
 SOCI 270 - Social Problems (3)
 TECH 305/ENVS 305X - Green Technologies (3)

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. Additional information for submitting applications and preparing proposals is available in the department office.

Certificate of Undergraduate Study

Social Entrepreneurship (9)

This certificate is designed to provide College of Business students with a set of courses focused on social entrepreneurship. This certificate will help students develop the entrepreneurial skills related to the unique features of building and sustaining ventures to generate economic, social, and environmental change and the role of microfinance organizations.

Admission to the certificate program is competitive. Students interested in the certificate should fill out and submit an application to the Department of Management located in Barsema Hall 245. Applications are available in the Management Department office or online at www.cob.niu.edu/mgmt/SocialEntrepreneurshipCertificate.pdf. Direct any questions regarding this certificate to the Department of Management or 815-753-6195.

A grade of C or above must be earned in all of the certificate courses. Only courses taken at NIU may be applied toward the certificate. Some of the courses may, with the approval of the major department, be applied toward an undergraduate major.

Requirements (9)

MGMT 311 - Social Entrepreneurship (3)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 411 - Entrepreneurship in Microfinance Organizations (3)

Course List

Business Administration (BADM)

395. CAREER PLANNING IN BUSINESS ADMINISTRATION (1). Career planning and job search skills relevant to business administration majors. Topics include preparation of resumes and cover letters, business etiquette, business communication skills, business ethics, and interviewing techniques. PRQ: Business administration major and UBUS 310.

458. INTERNSHIP IN BUSINESS ADMINISTRATION (3-6). Full-time work for a summer or a semester as a business administration intern in a business firm or organization under the supervision of the business administration 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: Business administration major, UBUS 310, and consent of department.

Management (MGMT)

101. INTRODUCTION TO BUSINESS AND ENTREPRENEURSHIP (1-3). Background information for students interested in business subjects. Facilitates the understanding of concepts, models, and approaches to business and entrepreneurship.

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.

311. SOCIAL ENTREPRENEURSHIP (3). Examination of the factors that support the development and growth of sustainable ventures to generate economic, social, and environmental change, including understanding the social value proposition, sustainable business models, and management practices related to resource acquisition, organization, and performance management frameworks. PRQ: Junior or senior standing, or consent of department.

320. FOUNDATIONS OF BUSINESS AND ENTREPRENEURSHIP (3). Identify and understand the functions within and environments of commercial enterprises in the context of entrepreneurial ventures. Topics include, but are not limited to, idea generation and evaluation, new venture creation, enterprise functions, the entrepreneur, corporate entrepreneurship, organizational ethics, and related topics. Not open to business majors. PRQ: ACCY 206 and ACCY 207, or ACCY 288, or consent of department.

327. CREATIVITY, INNOVATION, AND ENTREPRENEURSHIP (3). Study of methods used and development of skills needed to identify entrepreneurial opportunities and construct innovative solutions. Topics include theories of creativity, enterprise idea generation and evaluation, and other concepts, models and techniques used in practice. CRQ: UBUS 310 or MGMT 320 or consent of department.

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, systems, and measurement used by line managers and HR professionals to execute organizational strategy. Overview of the components of human resource management including job analysis and design, human resource planning, recruitment and selection, total compensation and benefits, training and development, employee relations, performance management, retention management, human resource management information systems, and employment law. PRQ: MGMT 333 or UBUS 310 and UBUS 311, or consent of department.

360. COACHING AND MENTORING (1). Exploration and practice of the skills needed to develop and change others through effective coaching and mentoring. Topics include developmental coaching and mentoring, personality differences and coaching effectiveness, ethical dilemmas in coaching and other concepts that influence the development of effective coaching and mentoring abilities. Opportunity to coach peers throughout the semester. May be repeated to a maximum of 3 times. CRQ: MGMT 335 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 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.

402X. RESOURCES STRATEGIES FOR NONPROFIT ORGANIZATIONS (3). *Crosslisted as PSPA 402*. Survey of resource strategies for nongovernmental public service organizations; including fundraising, grant writing, volunteer management, and oversight roles.

411. ENTREPRENEURSHIP IN MICROFINANCE ORGANIZATIONS (3). Study of the purposes, management, and effects of microfinance organizations. Topics to be covered include a review of current status of microfinance organizations, clients, management and operational issues, evaluation of different microfinance organizations and models, and sustainability. PRQ: MGMT 311 or consent of department.

412. BUSINESS LAW (3). History and development of the U.S. legal system and the social and legal environment of business. Government regulation of business, labor and employment law, contracts, sales, negotiable instruments, business entities and consumer protection law. Uses case materials and problems. PRQ: Junior standing 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.

417. LEADING AND MANAGING CHANGE (3). Develops knowledge and capabilities to manage and lead personal and organizational change. Topics include understanding how change occurs at the individual and organizational level, seeing opportunities for change, leveraging strengths, navigating cultural and ethical dynamics, overcoming resistance to change, and related topics. PRQ: MGMT 335 or consent of department.

421. GLOBAL SOCIAL VENTURE CONSULTING (3). Examination of strategic aspects of social entrepreneurship with a focus on developing and implementing strategies for global social ventures using an experiential learning approach. Opportunity to consult with global social ventures throughout the semester. PRQ: Grade of C or better in UBUS 310 or MGMT 320, and grade of C or better in MGMT 311, or consent of department. CRQ: MGMT 327.

427. ENTREPRENEURSHIP AND BUSINESS MODEL DESIGN (3). Introduction to and exploration of traditional and innovative venture practices combined to describe and define an enterprise. Topics include but are not limited to the value proposition offered, market drivers chosen, and revenue generation options to launch and sustain enterprises. PRQ: UBUS 310 or MGMT 320 or consent of department. CRQ: MGMT 327.

431. SOCIAL VENTURE COMPETITION (3). Develops knowledge and capabilities to create an innovative business model and a business plan to launch a new social venture. Examination of the commercial, social and technological factors unique to the contexts in which the social ventures will operate. Topics will include but are not limited to the value proposition offered, market drivers chosen, and revenue generation options to launch and sustain social enterprises. PRQ: Grade of C or better in MGMT 327 and MGMT 311, or consent of department.

436. COMPENSATION AND BENEFITS ADMINISTRATION (3). Design and application of compensation systems aligned with organizational strategy. Consideration of internal equity requirements and external market dynamics in wage system design through use of job evaluations and market surveys. Compensation as a means of effective recruitment, motivation, and retention of talent. Variable pay program design and execution. Benefits program design, cost containment, and program management. Statutes affecting compensation practices (e.g., minimum wage laws, unemployment compensation, worker's compensation). PRQ: Grade of C or better in MGMT 335 and MGMT 355.

437. ENTREPRENEURSHIP AND BUSINESS MODEL IMPLEMENTATION (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 MGMT 427 or consent of department.

438. HUMAN RESOURCE PLANNING AND STAFFING (3). The design and application of recruitment, selection and retention systems for the effective management of human capital by line managers and HR professionals. Workforce planning and identification or work requirements. Identification of tools and processes that facilitate effective person-organization matching. Development of internal and external recruitment strategies. Choice and validation of selection instruments. Calculation and analysis of selection utility. PRQ: 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 (1-6). 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). Focus on the development of talent through training and development initiatives. Discussion of theories and business cases related to training needs analysis, design, implementation, transfer, and evaluation; coaching and mentoring programs, career development, 360-degree feedback, succession planning, and other developmental interventions. Alignment of training and development programs with business strategy and human resource planning. PRQ: 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: Grade of C or better in MGMT 335 and MGMT 355.

448. **EMPLOYMENT LAW (3).** Design and application of legal compliance systems in human resource management. Specific areas of study include employment contracts, workplace privacy issues, Title VII of the Civil Rights Act, disability discrimination, sexual harassment, work safety laws, benefits laws and union-management relations. PRQ: 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.

456. **PRACTICUM IN HUMAN RESOURCE MANAGEMENT (3).** Internship involving full- or part-time work in one of the core areas of human resource management in a sponsoring organization under the supervision of a member of the Department of Management and an individual in the sponsoring company. Core areas include recruiting, staffing, training, compensation, employee relations, labor relations, or other areas related to the human resource management function. PRQ: Management major in human resource management emphasis and a grade of C or better in MGMT 355 and consent of department.

457. **MANAGERIAL NEGOTIATIONS (3).** Examination of the negotiation techniques and strategies relevant to individuals, groups, and organizational decision making as well as the development of skills to enhance the resolution of personal and professional conflicts. PRQ: Grade of C or better in UBUS 310 or consent of department.

458. **INTERNSHIP IN MANAGEMENT (1-3).** 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.

460. **HUMAN RESOURCE MANAGEMENT AND LEADERSHIP CONSULTING (3).** Develops the content knowledge and skills to successfully design and implement internal and external organizational consulting projects. Topics include elements of successful strategic partnering, implementation and management of organizational change, applied management research, and human capital measurement. PRQ: Management major, MGMT 335, MGMT 355, and consent of the 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: UBUS 311 and senior standing for all business majors. ACCY 331 (for ACCY majors); OMIS 442 or OMIS 450 or OMIS 452 or FINA 410 (for business administration majors); FINA 330, FINA 340, and FINA 350 (for FINA majors); MGMT 335 and MGMT 355 (for MGMT majors). CRQ: MKTG 495 (for MKTG majors); OMIS 498 (for OMIS majors); or consent of department.

470. **CURRENT TOPICS IN MANAGEMENT (1-3).** Study of new developments in theoretical or applied management, including current topics and issues. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: 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: 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: Grade of C or better in MGMT 335 and MGMT 355.

495. **INDEPENDENT STUDY IN MANAGEMENT (1-4).** 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.

499. **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. PRQ: Overall university GPA of at least 3.00, management major area GPA of 3.20 or higher, senior standing, and consent of department.

Management Faculty

Sarah J. Marsh, Ph.D., University of North Carolina, associate professor, chair

Douglas D. Baker, Ph.D., University of Nebraska, professor

Terrence R. Bishop, Ph.D., University of Iowa, associate professor

Jon P. Briscoe, D.B.A., Boston University, professor

James P. Burton, Ph.D., University of Washington, associate professor

Amanda J. Ferguson, Ph.D., London Business School, assistant professor

Charles R. Gowen, Ph.D., Ohio State University, professor

Christine H. Mooney, Ph.D., Indiana University, associate professor

Devaki Rau, Ph.D., University of Minnesota, associate professor

Barton M. Sharp, Ph.D., Purdue University, associate professor

Adam C. Stoverink, Ph.D., Texas A&M University, assistant professor

Mahesh Subramony, Ph.D., Central Michigan University, associate 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 three 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.

Marketing Learning Goals and Objectives

Graduates of the Bachelor of Science in Marketing program are expected to achieve these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

Graduates of the Marketing program will have:

1. The ability to apply marketing concepts. Graduates must demonstrate an understanding of the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods, and services to attract and retain customers. Key marketing concepts include those related to product, pricing, promotion, distribution, sales, management, market and business environments, and customer relationships and target markets.
2. Mastery of problem solving and critical thinking skills. Graduates must demonstrate marketing related problem solving and critical thinking skills using qualitative and/or quantitative tools. Graduates will demonstrate the ability to develop feasible solutions within fluid and situation specific business environments. Specific skills to demonstrate problem solving and critical thinking skills include analyzing key factors leading to the identification of a problem/ opportunity, conducting appropriate analyses to generate information, and utilizing generated information to develop suitable potential solutions to marketing problems based upon available resources and restrictions.
3. Mastery of written communication skills. Graduates must demonstrate the ability to collect, organize, interpret, and coherently present information in written format. Graduates will use proper grammar and language in developing business memos, formal business letters, business proposals, and business reports.

4. Mastery of oral communication skills. Graduates must demonstrate the ability to collect, organize, interpret, and coherently present information in an oral format. Graduates will use situation appropriate grammar, language, and professionalism to effectively convince and/or persuade and audience.
5. The ability to understand and effectively apply marketing metrics. Graduates must demonstrate an understanding of key marketing metrics and ability to utilize marketing metrics effectively in the analysis and solving of marketing problems. Specific skills graduates should master might include the ability to perform break-even point analysis, ratio analysis and other key metric analysis. Other key metrics analysis could include those relating to: 1) marketing planning and customers (e.g., market growth rates, market share, marketing cost per unit, customer acquisition costs, and return on investment); 2) product, price, and promotion offerings (e.g., new product purchase rates, advertising to sales ratios, gross rating points, response rates, conversion rates, costs per click, transactions per customer, and average transaction size); and 3) sales efforts (e.g., sales turnover rates, sales performance quotas, sales variances, and straight/ profit based commissions).
6. The ability to work effectively in teams. Graduates must possess the ability to work effectively with a group of other individuals to accomplish a mutual goal and produce high quality outcomes while recognizing the benefits and difficulties of working in teams. Specific skills graduates demonstrate include goal commitment, mutual respect, effective communication, flexibility and productivity.
7. Understanding of the global business environment. Graduates must demonstrate an understanding of the global forces that shape firms' domestic and global marketing strategies. Such forces would include those related to political, legal, economic, cultural, and financial variables.
8. Ethical awareness. Graduates must demonstrate an awareness of and personal philosophy toward ethical practices.

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 course required in the major, which includes courses in the business core and any additional upper-level required courses outside of marketing, required MKTG courses, and all electives required for the major.

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 495 - Marketing Strategy (3)
 Electives in marketing, UBUS 485, or one of the following areas of study (9-12)¹

Interactive Marketing (9)

MKTG 370 - Internet Marketing (3)
 MKTG 470 - Interactive Marketing Technology (3)
 One of the following (3)
 MKTG 348 - Integrated Marketing Communications (3)
 MKTG 355 - Multichannel Direct Marketing (3)
 MKTG 455 - Database Marketing Management (3)
 OMIS 452 - Database Management for Business (3)

International Marketing (9)

MKTG 367 - Principles of Global Marketing (3)
 MKTG 467 - Global Marketing Management (3)
 One of the following (3)
 MKTG 387 - International Study in Marketing (3)
 MKTG 410 - Professional Selling and Cultural Perspectives (3)
 MKTG 415 - Global Selling Perspectives (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)

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 301 - Elementary Statistics (4),
 OR STAT 350 - Introduction to Probability and Statistics (3)

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)

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.

Certificates of Undergraduate Study

Interactive Marketing (12)

Coordinator: Emily Cronauer, Department of Marketing

This certificate is designed for all majors who wish to have a certificate in interactive marketing. Interactive marketing is the ability to identify the customer, address the customer individually, and then address the customer again in a way that takes into account their his or her unique response. This type of marketing is based in direct marketing principles and facilitated by marketing technology, such as the internet and large-scale customer database applications. A certificate in this area will provide students with an understanding from a managerial as well as technical point of view of how to create, implement, and monitor interactive marketing programs using a variety of available marketing technologies.

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 course work within a period of four calendar years. Only courses taken at NIU may be applied toward the certificate. Courses used to satisfy the requirements for the certificate may be used toward an undergraduate degree in marketing. Courses used to satisfy the requirements for the certificate may have prerequisites that are not part of the certificate curriculum.

Students interested in the certificate should apply no later than the beginning of their final semester prior to graduation, but interested students are urged to apply as soon as they complete UBUS 310 for planning purposes. Applications are available in the Department of Marketing.

Required courses:

MKTG 370 - Internet Marketing (3)
 MKTG 443 - Marketing Research (3)
 MKTG 470 - Interactive Marketing Technology (3)
 One of the following (3)
 MKTG 348 - Integrated Marketing Communications (3)
 MKTG 355 - Multichannel Direct Marketing (3)
 MKTG 455 - Database Marketing Management (3)
 OMIS 452 - Database Management for Business (3)

¹ Credits earned in MKTG 310, Principles of Marketing, and MKTG 458, Internship in Marketing, may not be used to complete the elective requirement.

Professional Selling (12)

Coordinator: Robert Peterson, Department of Marketing

This certificate offers a comprehensive set of courses designed to develop, enhance, and apply students' knowledge in the area of business-to-business sales. The professional sales program certificate provides students with leading-edge instruction and practical experiences. Students completing this certificate will be prepared for success in entry-level sales positions as well as career advancement.

The certificate of undergraduate study in professional selling is open to all NIU students. Students must maintain good academic standing within the university, achieve a minimum of a C in each course applied toward the certificate, and complete all certificate work within a period of four calendar years. Courses used to satisfy the requirements for the certificate may also be applied toward an undergraduate degree in marketing. Some courses may have prerequisites that are not part of the certificate curriculum. Students are encouraged to enroll in MKTG 350 the semester after UBUS 310 or MKTG 310. MKTG 350 is the prerequisite for all other course work with this certificate.

Students interested in this certificate should apply at the beginning of the semester in which they will complete the last of the four courses listed below or contact the coordinator for admission procedures and other information.

MKTG 350 - Principles of Selling (3)

MKTG 435¹ - Business-to-Business Selling (3)

MKTG 446 - Sales Management (3)

One of the following

MKTG 450¹ - Advanced Professional Selling (3)

MKTG 410 - Professional Selling and Cultural Perspectives (3)

MKTG 415 - Global Selling Perspectives (3), with the consent of the department

Service Management (12)

Coordinator: Steve Kispert

A Certificate of Undergraduate Study in Service Management, which has a marketing component, is available. See a description of this certificate in the Department of Operations Management and Information Systems section of the catalog.

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 prepurchase 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. MULTICHANNEL DIRECT MARKETING (3). Survey of all aspects of direct marketing through multiple channels. Traditional direct marketing topics including direct mail, retail direct marketing, print media, and list management. Current topics including electronic media, interactive marketing, customer relationship marketing, 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.

387. INTERNATIONAL STUDY IN MARKETING (3). Short-term study-abroad experience to study cultural differences, problems, issues, trends, and practices in marketing within the international environment. Includes visits to foreign organizations, presentations by marketing managers and executives, and discussions with foreign and domestic international faculty. Supervised by a faculty member. PRQ: UBUS 310 or MKTG 310, or consent of department.

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.

410. PROFESSIONAL SELLING AND CULTURAL PERSPECTIVES (3). Short-term course that joins students from other countries with NIU students to study cultural differences in professional selling in a global economy. Course includes a company visit, out-of-class project, salesperson shadowing, two to three role plays and discussion of cultural factors influencing professional selling within the international environment. Students may not receive credit for both MKTG 410 and MKTG 450. PRQ: MKTG 350 or consent of department.

¹ MKTG 435 and MKTG 450 are corequisites.

415. GLOBAL SELLING PERSEPECTIVES (3). Short-term study-abroad experience to study cultural differences, problems, issues, trends, and practices in professional selling within the international environment. Includes: instruction from faculty in visiting countries, visits to foreign companies, presentations by company sales executives, and discussions with company representatives and international faculty about their selling strategies. Supervised by department faculty member. PRQ: MKTG 350 or consent of department.

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, 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 precall 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 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 AND DATA MINING (3). Intensive examination of the concepts and tools to manage and utilize a marketing information system, using database information in a marketing context. Emphasis on the use of various statistical tools to identify marketing opportunities. Topics may include recency, frequency, and monetary (RFM) analysis, clustering techniques, linear and logistic regression, and an introduction to neural networking and its use in marketing information systems. CRQ: MKTG 355 or OMIS 452.

458. INTERNSHIP IN MARKETING (3-6). 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: MKTG 367.

470. INTERACTIVE MARKETING TECHNOLOGY (3). Analysis and implementation of the technology used to support interactive marketing systems for business-to-business and business-to-customer marketing strategies. Topics include but are not limited to multichannel campaign management, search engine optimization technology and social networking applications. Requires students to use marketing technologies to plan and implement a project to create value for a client organization. PRQ: UBUS 310 or MKTG 310, and MKTG 370 and consent of department.

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 (1-3). 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.

499. 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

Geoffrey L. Gordon, Ph.D., University of Kentucky, professor, OTA/ Off the Record Research Professor of Investment Research, chair

Timothy W. Aurand, Ed.D., Northern Illinois University, professor
Elisa Fredericks, Ph.D., University of Illinois, Chicago, associate professor

Mark D. Groza, Ph.D., University of Massachusetts, assistant professor

Vijaykumar Krishnan Palghat, Ph.D., University of Cincinnati, assistant professor

Lauren I. Labrecque, Ph.D., University of Massachusetts, assistant professor

Peter H. Magnusson, Ph.D., St. Louis University, assistant professor

Robert M. Peterson, Ph.D., University of Memphis, associate professor, White Lodging Professor of Sales

Paul R. Prabhaker, Ph.D., University of Rochester, professor

Rick E. Ridnour, Ph.D., Iowa State University, Distinguished Teaching Professor, Enterprise Rent-A-Car Professor of Sales

Mark S. Rosenbaum, Ph.D., Arizona State University, associate professor, Kohl's Corporation Professor of Retail Marketing

Denise D. Schoenbachler, Ph.D., University of Kentucky, professor

Ursula Y. Sullivan, Ph.D., Northwestern University, assistant professor

Department of Operations Management and Information Systems (OMIS)

The Department of Operations Management and Information Systems (OM&IS) 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 business process improvement with the application of information technology. All OM&IS majors take courses in project management, database management systems, decision analysis, as well as process and quality management. The OM&IS curriculum is designed to support the skills associated with effective problem solving, teamwork, communication, and leadership.

In addition, students pursue one of two areas of study: Business Process Analysis or Business Systems Analysis. Business Process Analysis prepares students for entry-level positions as business process analysts. Courses in the Business Process Analysis area of study focus on the concepts, processes, and strategies associated with supply chain management, managing service organizations, and enterprise systems.

Business Systems Analysis prepares students for entry-level positions as business systems analysts. Courses in the Business Systems Analysis area of study focus on the analysis, design, and implementation of information technology solutions that support organizations in a global networked environment..

Operations Management and Information Systems Learning Goals and Objectives

Graduates of the Bachelor of Science in Operations and Information Management program are expected to achieve these learning goals and objectives in addition to the College of Business Undergraduate Learning Goals and Objectives.

Graduates with a Bachelor's degree in Operations and Information Management will produce innovative solutions to deliver products and services more efficiently and effectively in today's business environment.

Our graduates will have:

1. Processes: To provide the student with the knowledge to manage business processes.
 - Conceptualization: The student will conceptualize business as a collection of processes.
 - Process Evaluation: The student will illustrate proficiency with business process evaluation.
 - Process Improvement: The student will exhibit the ability to improve business processes.
2. Technology: To provide the student with the knowledge to apply information technology effectively.
 - Hardware: The student will display an understanding of hardware technology.
 - Software: The student will display an understanding of software technology.
 - Data: The student will display an understanding of data technology.
 - Networking: The student will display an understanding of network technology.
3. Managing Projects: To provide students with experience in solving business problems.
 - Project Management: The student will demonstrate an ability to manage a project.

- Project Integration: The student will be able to improve processes through the application of information technology appropriately.

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 351 and OMIS 352). 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.

OMIS prerequisites are met only by obtaining a grade of C or better. (It is necessary to repeat an OMIS prerequisite in which a grade below C was earned before taking the next course in the sequence.)

To graduate as an operations and information 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 OMIS courses, and all electives required for the major.

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, cannot be 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 (25-26)

OMIS 99 - Portfolio (0)
 OMIS 300 - Career Planning in Operations and Information Management (1)
 OMIS 327 - Decision Analysis (3)
 OMIS 352 - Managing Projects in Business (3)
 OMIS 442 - Process and Quality Improvement (3)
 OMIS 452 - Database Management for Business (3)
 OMIS 498 - Business Analysis Capstone (3)
 One of the following areas of study (9)

Business Systems Analysis (9)

OMIS 460 - Business Computing Environments and Networking (3)
 OMIS 462 - Business Systems Analysis, Design, and Development (3)
 OMIS 475 - Internet and Web Computing Technologies (3)

Business Process Analysis (9)

OMIS 450 - Service Operations (3)

OMIS 455 - Enterprise Resource Planning (3)

OMIS 478 - Supply Chain Systems (3)

Requirements outside Department (3)

MGMT 346 - Business Communication (3)

Total Hours for a Major in Operations and Information Management: 73-78**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 and information systems. 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 operations management and information systems. The program is administered by the department chair and 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 499, 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.

Certificates of Undergraduate Study**Business Analytics Using SAP Software (12)**

Coordinator: Steven Kispert, Department of Operations Management and Information Systems

This certificate is designed for all majors. Business Analytics is a broad category of technologies, applications, and practices for gathering, storing, accessing, and analyzing enterprise data to support effective decision making. Business Analytics has been consistently ranked as one of top five technology priorities during the past several years by chief information officers in Gartner's annual survey of IT executives. The market leader in business analytics application software is SAP. A certificate in Business Analytics Using SAP Software will allow students to understand how to run organizations more effectively by improving various business processes and using SAP technology.

Students must maintain good academic standing within the university, achieve a minimum grade of a C in each course applied toward the certificate, and complete all certificate course work within a period of four calendar years. Only courses taken at NIU may be applied toward the certificate. Courses used to satisfy the requirements for the certificate may only be applied toward an undergraduate degree with approval of the major department. Some courses may have prerequisites that are not part of the certificate curriculum.

Students interested in the certificate should apply no later than the beginning of their final semester prior to graduation, but they are urged to apply as soon as they complete UBUS 310 or OMIS 338 so the coordinator may advise students regarding course scheduling. Applications are available in the Department of Operations Management and Information Systems.

Pre-Admission Requirements:

OMIS 338 - Principles of Operation Management (3),

OR UBUS 310 - Business Core: Lecture (9)

Required Courses:

OMIS 444 - Manufacturing Systems Management (3)

OMIS 455 - Enterprise Resource Planning (3)

OMIS 478 - Supply Chain Systems (3)

OMIS 485 Current Topics in Operations Management and Information Systems (3)

Information Systems (9)

Coordinator: Steven Kispert, Department of Operations Management and Information Systems

This certificate is designed to provide non-OM&IS students with a set of courses focused on information systems and technology. Organizations depend on information technology to achieve competitive advantage. A certificate in information systems will allow students to understand how the application of information technology can improve business processes.

Students must maintain good academic standing within the university, achieve a minimum grade of a C in each course applied toward the certificate, and complete all certificate course work within a period of four calendar years. Only courses taken at NIU may be applied toward the certificate. Courses used to satisfy the requirements for the certificate may only be applied toward an undergraduate degree with approval of the major department. Some courses may have prerequisites that are not part of the certificate curriculum.

¹ Cannot be applied toward the certificate by Operations and Information Management majors.

Students interested in the certificate should apply no later than the beginning of their final semester prior to graduation, but they are urged to apply as soon as they complete UBUS 310 so the coordinator may advise students regarding course scheduling. Applications are available in the Department of Operations Management and Information Systems.

Three of the following five OMIS courses:

- OMIS 352 - Managing Projects in Business (3)
- OMIS 452 - Database Management for Business (3)
- OMIS 462 - Business Systems Analysis, Design, and Development (3)
- OMIS 475 - Internet and Web Computing Technologies (3)
- OMIS 478 - Supply Chain Systems (3)

Service Management (12)

Coordinator: Steve Kispert, Department of Operations Management and Information Systems

This certificate is designed to provide College of Business students with a set of courses focused on the growing service sector of the economy. Students will be prepared for business careers not only in traditional service industries such as health care, airlines, financial services, and sales, but also in other business areas that have become increasingly service oriented.

Students must maintain good academic standing within the university, achieve a minimum grade of a C in each course applied toward the certificate, and complete all certificate course work within a period of four calendar years. Only courses taken at NIU may be applied toward the certificate. Courses used to satisfy the requirements for the certificate may also be applied toward an undergraduate degree with approval of the major department. Some courses may have prerequisites that are not part of the certificate curriculum.

Students interested in the certificate should apply no later than the beginning of their final semester prior to graduation, but they are urged to apply as soon as they complete UBUS 310 so the coordinator may advise students regarding course scheduling. Applications are available in the Department of Operations Management and Information Systems.

- OMIS 450, Service Operations (3)
- MKTG 425, Services Marketing (3)

Two of the following:

- OMIS 452, Database Management for Business (3)¹,
OR MKTG 455, Database Marketing Management (3)
- OMIS 442, Process and Quality Improvement (3)
- OMIS 462, Business Systems Analysis, Design, and Development (3)

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 database 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. DECISION 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. 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.

340. 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 and OMIS 351, or consent of department. CRQ: UBUS 311 and OMIS 352.

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. Must be taken concurrently with UBUS 310, or in the semester or term immediately following completion of UBUS 310.

352. MANAGING PROJECTS IN BUSINESS (3). Focuses on the application and integration of concepts, processes, and tools to plan and manage business projects. Topics will include the core areas of project management as defined in the Project Management Body of Knowledge (PMBOK). PRQ: UBUS 310. CRQ: OMIS 351, or consent of department.

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 UBUS 310 and 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. PRQ: Consent of department.

421. SIMULATION MODELING OF BUSINESS PROCESSES (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 and OMIS 351, or consent of department.

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: OMIS 340 or consent of department.

442. PROCESS AND QUALITY IMPROVEMENT (3). Detailed examination of the issues, techniques, and methodologies for improving processes and controlling quality in manufacturing and service organizations. Topics include the history of process and quality improvement, quality culture, customer-driven quality, six sigma methods, tools for process improvement, statistical process control, and building and sustaining performance excellence. PRQ: UBUS 310 or consent of department.

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 SYSTEMS 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.

449. BUSINESS APPLICATION DEVELOPMENT (3). Study of programming logic for designing and developing business-based applications. Extensive experience with a contemporary programming language in common use in business. PRQ: UBUS 310, and OMIS 351.

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, healthcare, hotel/resort, and restaurant service delivery systems will be examined. Topics include service strategy, globalization of services, quality, location selection, layout design, and capacity management as applied to service environments. PRQ: UBUS 310.

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 and OMIS 351, or consent of department.

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. CRQ: OMIS 452

458. INTERNSHIP IN OPERATIONS AND INFORMATION MANAGEMENT (3-6). 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. BUSINESS COMPUTING ENVIRONMENTS AND NETWORKS (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: UBUS 310 and OMIS 351.

462. BUSINESS SYSTEMS ANALYSIS, DESIGN, AND 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: OMIS 352 and OMIS 452.

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.

472. INTRODUCTION TO BUSINESS INTELLIGENCE (3). Introduction to concepts in business intelligence (BI) and exploration of how BI can improve management effectiveness through better decision-making. Exploration of the development of BI through the use of dashboards, management reporting, and performance measurement. Hands-on experience using current BI tools in the areas of data warehousing, data marts, business analytics, web analytics, real-time data, and mobile applications. PRQ: OMIS 452.

475. INTERNET AND WEB COMPUTING 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: OMIS 452.

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: UBUS 310.

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 478.

485. CURRENT TOPICS IN OPERATIONS MANAGEMENT AND INFORMATION SYSTEMS (3-6). Instruction focused on current topics within the operations, logistics, or information systems area. May be repeated to a maximum of 6 semester hours when topic varies. Concurrent enrollment in multiple sections and topics is permissible with a maximum of 6 semester hours per semester. PRQ: Consent of department.

495. INDEPENDENT STUDY IN OPERATIONS AND INFORMATION MANAGEMENT (1-3). 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. BUSINESS ANALYSIS CAPSTONE (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 327, OMIS 352, OMIS 442, OMIS 452, and final semester of senior year.

Operations Management and Information Systems Faculty

Chang Liu, D.B.A., Mississippi State University, professor, chair
Gerald R. Aase, Ph.D., Indiana University, associate professor
Charles E. Downing, Ph.D., Northwestern University, professor
Jung Young Lee, Ph.D., Michigan State University, assistant professor
Yipeng Liu, Ph.D., University of Florida, assistant professor
Brian G. Mackie, Ph.D., University of Iowa, associate professor
Jack T. Marchewka, Ph.D., Georgia State University, professor
Kathleen L. McFadden, Ph.D., University of Texas, Arlington, professor
Charles G. Petersen, Ph.D., Indiana University, professor
Nancy L. Russo, Ph.D., Georgia State University, professor
Andrew J. Setterstrom, Ph.D., Southern Illinois University, assistant professor
Elizabeth R. Towell, Ph.D., University of Wisconsin-Milwaukee, associate professor

College of Education

LaVonne I. Neal, Ph.D., dean
Connie Fox, Ed.D., associate dean
Jeffrey B. Hecht, 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 athletic training
 B.S. in kinesiology
 B.S.Ed. in physical education

Department of Leadership, Educational Psychology and Foundations

Department of Literacy and Elementary Education
 B.S.Ed. in elementary education

Department of Special and Early Education
 B.S. in early childhood studies
 B.S.Ed. in special education

State Requirements for Educator Licensure

ILTS Test of Academic Proficiency

Successful completion of the Illinois Licensure Testing System (ILTS) Test of Academic Proficiency (TAP) is required for entry into educator licensure 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 an educator licensure program need to take the ILTS Test of Academic Proficiency as soon as possible.

Grade Minimum

All professional education and content-area coursework that forms part of an application for licensure, endorsement, or approval must have been passed with a grade no lower than C or equivalent in order to be counted towards fulfillment of the applicable ISBE requirements. Students must see individual program advisors for list of courses.

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.

The student learning outcomes for the contract majors are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

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.

Literacy Clinic Services

The university offers clinic services in literacy 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 Literacy 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 literacy or to become clinicians. Through the clinic, teachers are provided an opportunity to make diagnostic studies of children who have literacy 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, CAHE)

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, CAHE)

CAHA 401. INTRODUCTION TO ADULT AND HIGHER EDUCATION (3). Introduction to the field of adult and higher education and the various contexts in which it resides such as: basic education, high schools, community colleges, universities, private schools, businesses, governmental agencies, the military, nonprofit organizations, and religious institutions.

CAHA 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.

CAHA 490. WORKSHOP IN ADULT AND HIGHER EDUCATION (1-3). Opportunity provided to work cooperatively under the guidance and supervision of an experienced educator in adult and higher education contexts. Intensive analysis of specific programs of adult and higher 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. Enrollment in more than one section of this course during a semester is permitted. PRQ: Consent of department.

CAHA 492. SPECIAL TOPICS IN ADULT AND HIGHER EDUCATION (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies. Enrollment in more than one section of this course during a semester is permitted.

CAHA 497. INDEPENDENT STUDY (1-3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

CAHE 493. LEADERSHIP IN THE COLLEGE EXPERIENCE (3). Advanced exploration of specific leadership roles and other issues in college settings. May be repeated to a maximum of 9 semester hours when leadership topic varies.

Counseling (CAHC)

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.

CAHC 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.

CAHC 410. FOUNDATIONS OF CAREER EDUCATION (3). Concepts, evaluation, overview, and programs in career education.

CAHC 490. WORKSHOP IN COUNSELING (1-3). Contemporary issues and problems in the provision of human services. May be repeated to a maximum of 6 semester hours when subject varies.

CAHC 493. CRISIS INTERVENTION IN THE HELPING PROFESSIONS (3). Role and responsibilities of human services professionals in crisis intervention. Volunteerism, assessment, and case management for crisis situations in educational, community agency, medical, emergency management, and human resources settings.

CAHC 497. INDEPENDENT STUDY (1-3). 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

Suzanne E. Degges-White, Ph.D., University of North Carolina at Greensboro, professor, chair

D. Eric Archer, Ph.D., Oklahoma State University, assistant professor

Teresa A. Fisher, Ph.D., University of Illinois, associate professor
LaVerne Gyant, Ed.D., Pennsylvania State University, professor
Jorge Jeria, Ph.D., Iowa State University, professor

Charles E. Myers, Ph.D., University of North Texas, assistant professor

Debra Pender, Ph.D., Southern Illinois University, associate professor

Jane E. Rheineck, Ph.D., University of Arkansas, associate professor

Lee Covington Rush, Ph.D., Ohio State University, associate professor

Toni R. Tollerud, Ph.D., University of Iowa, Distinguished Teaching Professor

Scott A. Wickman, Ph.D., Southern Illinois University, associate professor

Department of Educational Technology, Research and Assessment (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. Not open to students with previous experience with data processing, information systems, or who have taken ETT 429, without permission of their major department.

310. INSTRUCTIONAL DESIGN MODELS, STRATEGIES AND TACTICS (3). Introduction to instructional design, application of instructional design models, and design of appropriate instructional strategies and tactics.

311. INSTRUCTIONAL MEDIA LITERACY, PROTOTYPING AND PUBLICATION (3). Introduction to principles of instructional media literacy, iterative design prototyping and publication for the purposes of developing well-designed and accessible print and digital content.

401A. INTEGRATING TECHNOLOGY INTO THE ELEMENTARY CLASSROOM (2). Advanced skills and topics in learning technologies for the preservice 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 or students who have taken ETT 229, 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 (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.

448. INSTRUCTIONAL ARCHITECTURE FOR LEARNING APPLICATIONS (3). Introduction to principles of instructional architecture, message design, and user interaction to plan, design, develop, and evaluate the effectiveness of learning applications.

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.

459. LEARNER-CENTERED EDUCATIONAL COURSEWARE DEVELOPMENT (3). Design and develop learner-centered educational courseware for various delivery modes. Exploration of design methodologies for educational software and development systems commonly used in education. PRQ: ETT 310 and ETT 311.

464. HUMAN PERFORMANCE TECHNOLOGY (3). Introduction to the definition, models, and principles of Human Performance Technology (HPT). Exploration of HPT needs assessment and performance audit, and intervention solutions to performance problems including various forms of training, job aids, and non-training recommendations. PRQ: ETT 310.

490. WORKSHOP IN INSTRUCTIONAL TECHNOLOGY (1-3). 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 (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (1-3). 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)

340. SURVEY METHODS FOR TRAINING AND EVALUATION (3). Introduction to methods used in survey implementation. Overview of the survey process including choosing a survey platform (e.g., paper, electronic); survey instrument selection and/or design; sampling techniques; and summarizing, interpreting, and communicating survey results.

430. CLASSROOM ASSESSMENT IN ELEMENTARY EDUCATION (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.

431. PROGRAM/PERFORMANCE EVALUATION (3). Introduction to formative and summative methods used for evaluating various programs and initiatives. Fundamentals of the evaluation process include: involving stakeholders; conducting a needs assessment; developing goals and indicators; designing evaluation frameworks; collecting, analyzing, and interpreting data; and reporting evaluation findings.

434. ASSESSING STUDENTS WITH SPECIAL NEEDS (3). Nondiscriminatory assessment procedures for identifying and enhancing educational outcomes for students with special needs. PRQ: SESE 240 or consent of department.

440. CLASSROOM ASSESSMENT TECHNIQUES (3). Purpose and methods of formal and informal classroom assessment for guiding and communicating instructional decisions. Techniques for designing, using, and evaluating curriculum-aligned assessments through traditional (e.g., paper-and-pencil, standardized and standards-based assessments) and alternative methods (e.g., performance-based, authentic assessments). Emphasis placed on practical applications and data-based decision making. Designed to be taken by majors outside the College of Education seeking K-12 or secondary initial educator licensure. PRQ: Minimum 2.50 GPA. Students taking this course are not eligible to take ETR 430.

450. DATA ANALYSIS FOR DESIGN AND EVALUATION (3). Introduction to the evaluation of instructional and training programs. Exploration of data collection methods and analysis approaches used to assess effectiveness of instructional and training programs, both during the instructional development process or after intended trainings are delivered. PRQ: ETT 310 and ETR 340; or consent of the instructor.

492. SPECIAL TOPICS IN RESEARCH AND ASSESSMENT (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT RESEARCH IN RESEARCH AND ASSESSMENT (1-3). 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

Wei-Chen Hung, Ph.D., Indiana University, associate professor, chair

Rebecca P. Butler, Ph.D., University of Wisconsin, Presidential Teaching Professor

Cynthia S. Campbell, Ph.D., Southern Illinois University, associate professor

Vicki L. Collins, Ph.D., University of Oregon, assistant professor

John Cowan, Ph.D., University of New Mexico, assistant professor

Jeffrey B. Hecht, Ph.D., University of California, Riverside, professor

Pi Sui Hsu, Ph.D., Pennsylvania State University, associate professor

Rebecca Hunt, Ph.D., University of Toledo, assistant professor

Laura Ruth Johnson, Ph.D., University of California at Berkeley, associate professor

Hayley J. Mayall, Ph.D., University of Connecticut, 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

Cynthia York, Ph.D., Purdue University, assistant professor

Department of Kinesiology and Physical Education (KNDN, KNPE, LESM)

Admission to the B.S. in athletic training 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), and coaching. 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 licensure program meets requirements for teaching physical education at all levels. The licensure program meets requirements for secondary licensure. Those who receive licensure may also teach in a second field upon successful completion of necessary course work. Students are encouraged to seek middle grades endorsement; additional course work is necessary.

The B.S. program in athletic training is designed for students preparing to become athletic trainers (AT). In collaboration with the physician, the AT student provides services consisting of prevention, emergency care, clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions involving impairment, functional limitations, and disabilities. Athletic trainers work under the direction of physicians, as prescribed by state licensure statutes.

The B.S. program in kinesiology is designed for students preparing for professional opportunities in health behavior, sport performance, and cardiac rehabilitation settings. The program provides a rigorous program of study combining classroom, laboratory, field experiences, and a culminating internship that prepare students to become professionals in the health and fitness industry.

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 licensure to teach physical education must submit a satisfactory electronic teaching portfolio to complete student teaching requirements. 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 core competency requirements (12 credit hours) and pass the ILTS Test of Academic Proficiency. These requirements must be met prior to admission to KNPE 343. Admission to KNPE 343 constitutes admission to teacher education in physical education. Once admitted to the program, students must provide proof of valid First Aid/CPR certification (American Red Cross or American Heart Association) each semester. In accordance with ISBE requirements, students must earn a grade of C or better in the following courses in order to be eligible for licensure: KNPE 200, KNPE 335, KNPE 340, KNPE 343, KNPE 344, KNPE 348, KNPE 364, KNPE 365, KNPE 366, KNPE 367, KNPE 368, KNPE 421, KNPE 446, KNPE 449, KNPE 466, KNPE 467, KNPE 468, KNPE 490, KNPE 492. Students are encouraged to maintain close contact with their advisers as the teacher preparation program in physical education is tightly sequenced.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. General Physical Education/6-12 Educator Licensure

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure.

Requirements in Department (65-66)

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 (2)
 KNPE 200 - Introduction to Teaching Physical Education (2)
 KNPE 209 - Tumbling (½)
 KNPE 225 - Fundamental Sport Skills I (2)
 KNPE 226 - Fundamental Sport Skills II (2)
 KNPE 227 - Rhythmic and Cooperative Gymnastics (½)
 KNPE 310 - Psychological Aspects of Sport and Exercise (3)
 KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
 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 364 - Fitness Education Methods for K-12 Students (3)
 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 (16-20)

- 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)
 - TLCI 422 - Middle School Organization and Instruction (3)
 - EPS 419 - The Middle School Child (3) or State Approved Equivalents
- Fulfillment of requirements for educator licensure (See program director.)

Total Hours for Emphasis 1, General Physical Education/6-12 Educator Licensure: 83-88

Recommendations

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 Educator Licensure

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure.

Requirements in Department (69-70)

- KNDN 220 - Recreational Dance Forms (2)
- KNDN 351 - Multicultural Dance (2)
- KNPE 200 - Introduction to Teaching Physical Education (2)
- KNPE 209 - Tumbling (½)
- KNPE 225 - Fundamental Sport Skills I (2)
- KNPE 226 - Fundamental Sport Skills II (2)
- KNPE 227 - Rhythmic and Cooperative Gymnastics (½)
- KNPE 310 - Psychological Aspects of Sport and Exercise (3)
- KNPE 335 - Developmental Skill-Based Approach to Teaching (3)
- 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 364 - Fitness Education Methods for K-12 Students (3)
- 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 449 - Current Issues in Physical Education and Sport (2)
- 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 educator licensure (See program director.)

Total Hours for Emphasis 2, General Physical Education/K-12 and 6-12 Educator Licensure: 84

Recommendation

Students are encouraged to select from the following in order to become a more fully prepared teacher.

- KNDN 216 - Modern Dance (½)
- 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)
- TLCI 422 - Middle School Organization and Instruction (3)
- EPS 419 - The Middle School Child (3) or State Approved Equivalents

Major in Athletic Training (B.S.)

The major in athletic training reflects the requirements of the Commission on the Accreditation of Athletic Training Education, and students who want to sit for the Board of Certification (BOC) examination must complete this degree. Current policies and procedures regarding eligibility for the BOC examination are available in the department's program director's office.

Admission to the athletic training major 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 an overall NIU GPA of 2.50. Students enrolled in the athletic training major 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (71-74)

KNPE 202 - Introduction to Athletic Training (1)
 KNPE 217 - Personal Health-Related Fitness Development (1)
 KNPE 242 - Techniques of Resistance Training (1)
 KNPE 243 - Program Development of Resistance Training (1)
 KNPE 264 - Principles of Injury Prevention and Care (3)
 KNPE 265 - Practicum in Athletic Training (3)
 KNPE 266 - Emergency Medical Response (3)
 KNPE 310 - Psychological Aspects of Sport and Exercise (3)
 KNPE 314 - Applied Kinesiology (4)
 KNPE 322 - Clinical Proficiencies in Athletic Training: Upper-Extremity Assessment (2)
 KNPE 323 - Clinical Proficiencies in Athletic Training: Lower-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 445 - Measurement and Evaluation in Exercise Science (3)
 KNPE 452 - Applied Physiology of Exercise (4)
 KNPE 474 - Medical Issues in Athletic Training (3)
 Select one from the following (4-6)
 KNPE 490 - Adapted Physical Education (3) and KNPE 492 - Special Physical Education Clinic Practicum (1-2),
 OR KNPE 453 - Exercise Programs for Adult Special Populations (3) and KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (1-3),
 OR KNPE 454 - Exercise Gerontology (3) and KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (1-3)
 KNPE 491 - Therapeutic Exercise (3)
 KNPE 494 - Internship in Kinesiology (6)

Requirements outside Department (22-24)

AHCD 318 - Medical Terminology (3)
 BIOS 103 - General Biology (3),
 OR BIOS 208 - Fundamentals of Biology (3) and BIOS 210 - Fundamentals of Biology I Laboratory (1)
 BIOS 311 - Functional Human Anatomy (4),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 110 - Chemistry (3),
 OR *CHEM 210 - General Chemistry I (3)
 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)
 *PHHE 206 - Contemporary Health Concepts (3)
 *PSYC 102 - Introduction to Psychology (3)

Total Hours for a Major in Athletic Training: 93-98

Major in Kinesiology (B.S.)

All students pursuing the B.S. degree with a major in kinesiology are required to have a university GPA of 2.50 or above and to have satisfactorily completed all required course work prior to the culminating internship, KNPE 494. Students are required to earn grades of C or better in the following courses: KNPE 305, KNPE 314, KNPE 445, KNPE 452, KNPE 463, and the university's mathematics core competencies.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (43)

KNPE 262 - First Aid and CPR (2)
 KNPE 301 - Introduction to Kinesiology (3)
 KNPE 305 - Psychological and Sociological Aspects of Physical Activity (3)
 KNPE 314 - Applied Kinesiology (4)
 KNPE 346 - Methods of Group Fitness Instruction (3)
 KNPE 350 - Principles and Techniques of Resistance Training (3)
 KNPE 443 - Exercise Therapy for Acute and Chronic Conditions (3)
 KNPE 445 - Measurement and Evaluation in Exercise Science (3)
 KNPE 452 - Applied Physiology of Exercise (4)
 KNPE 463 - Exercise and Physical Activity across the Lifespan (3)
 KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (1-3)
 KNPE 494 - Internship in Kinesiology (6)
 LESM 438 - Sport and Fitness Management Strategies (3)
 One of the following areas of study (10)
 Wellness Focus (10):
 KNPE 462 - Clinical Exercise Physiology (4)
 KNPE 464 - Scientific Basis of Exercise Prescription and Progression (3)
 KNPE 465 - Programming, Planning, Implementation, Evaluation (3)
 Performance Focus (10):
 KNPE 310 - Psychological Aspects of Sport and Exercise (3)
 KNPE 470 - High Performance Development (4)
 KNPE 472 - Periodization for Performance Enhancement (3)

Requirements outside Department (17-18)

*BIOS 103 - General Biology (3)
 *BIOS 105 - General Biology Laboratory (1),
 OR *CHEM 111 - Chemistry Laboratory (1)
 *BIOS 311 - Functional Human Anatomy (4),
 OR *BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 110 - Chemistry (3)
 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)

Total Hours for a Major in Kinesiology: 70-71

Minor in Kinesiology and Physical Education

Option 1. Physical Education (32½-34½)

This option is designed for the licensed 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 225 - Fundamental Sport Skills I (2)
 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 364 - Fitness Education Methods for K-12 Students (3)
 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-licensure 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 educator licensure. 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 (26-33)

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 12 ½)

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)

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.

154. BALLET I (2). Knowledge and beginning techniques of ballet.

155. BALLET II (2). Continuation of the development of performance, knowledge, and appreciation of classical ballet.

156. INTERNATIONAL FOLK DANCE I (2). Folk dances of many countries applicable to use in school and recreational programs.

158. MODERN DANCE I (2). Modern dance techniques and creative exploration of the elements of time, space, and force.

159. MODERN DANCE II (2). Continuation of KNDN 158, with emphasis on more advanced techniques, skills, and compositions.

160. JAZZ DANCE I (2). Basic techniques of jazz dance. Includes a variety of early jazz styles

161. JAZZ DANCE II (2). Intermediate jazz technique with emphasis on current trends.

162. SOCIAL DANCE I (1). Basic elements and creative routines for foxtrot, waltz, swing, discotheque, and various South American dances.

164. TAP TECHNIQUES I (2). Introduction to elementary sounds and steps.

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.

166. AEROBIC DANCE (2). Concepts and application of aerobic dance exercises to improve flexibility, cardiovascular endurance, muscular strength, muscular endurance, and body composition.

167. "ORCHESIS" PERFORMANCE (1). Refinement of dance skill and practical application of production, choreography, and performance as related to dance.

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.

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.

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.

222. SOCIAL DANCE (½). Contemporary social dance forms. PRQ: Kinesiology or physical education major or minor, or consent of department.

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.

265. TAP DANCE (½). Introduction to the basic concepts of tap movement and history of tap. Emphasis on the development of tap movement patterns.

351. MULTICULTURAL DANCE (2). Analysis of movements and teaching strategies for multicultural dance. Promotes understanding of our global society. PRQ: Physical education major or minor.

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.

355. FITNESS AND CONDITIONING FOR DANCERS (2). 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.

356. PRACTICUM IN DANCE (1). Opportunity for student dancers to observe, interact with, and teach children K-12. CRQ: KNDN 353.

365. ACCOMPANIMENT FOR DANCE (2). Development of basic concepts of the elements of music and dance through analysis, composition, technique, improvisation, and performance.

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.

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.

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.

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.

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.

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.

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

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.

#101. PRACTICUM IN PHYSICAL EDUCATION (1). Experimental courses designed to meet current needs of students. Activities may change each semester.

102. PHYSICAL FITNESS (2). Concepts and application of exercise and nutrition toward health-related fitness: body composition, cardiovascular endurance, flexibility, muscular strength, and endurance.

104. WEIGHT TRAINING AND CONDITIONING (1). Fundamental skills and techniques of weight training.

105. ADVANCED WEIGHT TRAINING (2). Advanced skills and techniques of weight training. PRQ: KNPE 104.

106. YOGA (1). Elementary and intermediate yoga postures and exercises.

109. JOGGING (1). Techniques, principles, and practice in jogging.

110. RELAXATION (1). Concepts and application of self-controlled muscular relaxation with emphasis on freedom from stress and anxiety.

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.

112. ARCHERY I (1). Fundamental skills and techniques of archery.

113. BADMINTON I (1). Introduction to basic badminton skills and game play.

114. BADMINTON II (1). Continuation of the knowledges and skills of badminton with consideration of relevant kinesiological and physiological factors. PRQ: KNPE 113.

117. BOWLING I (1). Fundamental skills and techniques of bowling.

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.

119. GOLF I (1). Introduction to golf with emphasis on fundamental skills, techniques, and strategy.

120. GOLF II (2). Continuation of golf knowledges and techniques. Emphasis on consistent performance based on application of relevant kinesiological factors. PRQ: KNPE 119.

122. RACQUETBALL (1). Fundamental skills, techniques, and strategies of racquetball. Eye protection required while on court.

123. TENNIS I (1). Introduction to techniques and strategy of beginning tennis.

124. TENNIS II (1). Continuation of techniques and strategy of tennis with consideration of kinesiological and physiological aspects. PRQ: KNPE 123.

131. AIKIDO (1). Skills, techniques, and strategy of aikido.

¹ Courses marked with the symbol # involve risk or safety factors. The department reserves the right to deny admission to or continuation of enrollment in these courses to any student who is deemed a risk factor to others or to himself or herself.

132. JUDO (1). Skills, techniques, and strategy of judo.
133. KARATE (1). Skills, techniques, and strategy of karate.
138. BASKETBALL I (1). Introduction to basketball including fundamental rules, techniques, and strategy.
139. BASKETBALL II (1). Continuation of techniques and strategy of basketball with consideration of kinesiological and physiological factors. PRQ: KNPE 138.
141. FLAG FOOTBALL (1). Fundamental skills, techniques, and strategy of flag football.
142. SOCCER (1). Fundamental skills, techniques, and strategy of soccer.
143. SOFTBALL (1). Fundamental skills and strategy of softball.
145. VOLLEYBALL I (1). Introduction to volleyball skills, techniques, and strategy.
146. VOLLEYBALL II (2). Continuation of skills, techniques, and strategy of volleyball, including consideration of basic physiological, kinesiological, and biomechanical principles. PRQ: KNPE 145.
148. CORE STRENGTH AND STABILITY (1). Concepts and application of strength and stability training as it relates to the musculature responsible for controlling spine position. Both traditional and contemporary exercises will be explored.
168. LEARN TO SWIM (1). Water adjustment skills, basic strokes, and water entry techniques for the nonswimmer.
169. SWIMMING I (1). Basic water adjustment skills, strokes, and diving for the beginner.
170. SWIMMING II (1). Intermediate swimming. Includes strokes, dives, safety skills.
- #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.
177. SWIMMING CONDITIONING (2). Concepts of physical fitness and their application through aquatic exercise programs. PRQ: Ability to swim in deep water.
- #182. CANOEING I (1). Basic skills and knowledges of canoeing including safety procedures and recreational aspects. PRQ: Ability to swim in deep water.
186. HORSEBACK RIDING I (1). Fundamental equestrian skills, techniques, and knowledge.
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.
188. MARATHON TRAINING (2). Theoretical and applied principles and practices of training to run in marathons.
189. OLYMPIC WEIGHTLIFTING (1). Concepts and application of Olympic weightlifting techniques and progression
190. Tumbling (1). Fundamental skills and techniques of tumbling.
193. TUMBLING AND FLOOR EXERCISE (2). Intermediate tumbling skills with variations applicable to floor exercise composition. PRQ: KNPE 190 or consent of department.
- #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.
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.
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.
- 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.
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.
201. INTRODUCTION TO EXERCISE SCIENCE AND SPORT PROFESSIONS (3). Professionals' roles in and competencies to exercise science and sport industry careers. PRQ: Declared kinesiology major; to be taken within the first 30 semester hours of professional course work.
202. INTRODUCTION TO ATHLETIC TRAINING (1). Introduction to professional expectations, behaviors, and development in athletic training.
209. TUMBLING (½). Skills and techniques of tumbling. PRQ: Physical education major or minor.
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.
225. FUNDAMENTAL SPORT SKILLS I (2). Skill development, performance, and analysis of basketball, soccer, softball, and volleyball. PRQ: Physical education major or minor.
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.
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. PRQ: Physical education major or minor.
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.
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.
240. AQUATIC FITNESS (1). Techniques and materials needed to develop aquatic exercise programs. PRQ: KNPE 217.
241. AEROBIC FITNESS (1). Application of aerobic training principles and program design. PRQ: KNPE 217.
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.

¹ Courses marked with the symbol # involve risk or safety factors. The department reserves the right to deny admission to or continuation of enrollment in these courses to any student who is deemed a risk factor to others or to himself or herself.

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.

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 licensure only.

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. First Aid and CPR certificates from the American Red Cross (ARC) or American Heart Association (AHA) are granted upon successful course completion and ARC or AHA requirements.

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. PRQ: Admission into the emphasis in athletic training.

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. PRQ: Admission into the emphasis in athletic training.

266. EMERGENCY MEDICAL RESPONSE (3). Designed specifically for an individual in Athletic Training who has a duty to respond in an emergency situation. Covers professional rescuer skills and knowledge related to emergency assessment; airway and ventilation, cardiopulmonary resuscitation and automatic external defibrillation (AED), medical trauma emergencies, sudden illness, and emergency medical service (EMS) operations. American Red Cross Emergency Medical Response and CPR for the Professional Rescuer certificates granted upon successful completion of course and ARC requirements. Consent of department.

301. INTRODUCTION TO KINESIOLOGY AND SPORT PROFESSIONS (3). Introduction to concepts and competencies for careers in kinesiology.

304. INTRODUCTION TO COMMUNITY EDUCATION: PHYSICAL ACTIVITY ACROSS THE LIFESPAN (1). Orientation to physical activity across the lifespan in community settings. Introduction to the history, theory, and practice of promoting physical activity out of school. Includes a field component. Criminal Background Check required. CRQ: SESE 304 and SEEC 304.

305. PSYCHOLOGICAL AND SOCIOLOGICAL ASPECTS OF EXERCISE AND PHYSICAL ACTIVITY (3). Study of psychological and sociological aspects related to exercise and physical activity participation with a focus on the theoretical understanding of issues related to exercise initiation and adherence across the lifespan. PRQ: PSYC 102 or PSYC 219.

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.

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: Kinesiology and physical education major only and PSYC 102 or PSYC 219.

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, physical education major or minor.

314. APPLIED KINESIOLOGY (4). Study of anatomical and mechanical principles of human movement and application of these principles to the analysis of motor tasks and sports skills. Laboratory experiences provide an opportunity for the application of the theoretical knowledge acquired in lecture discussion. 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.

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.

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 major.

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. PRQ: KNPE 265.

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. PRQ: KNPE 265.

324. ASSESSMENT OF LOWER-EXTREMITY INJURY (3). In-depth 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.

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.

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 265.

331. CLINICAL EXPERIENCE IN ATHLETIC TRAINING I (3). Preprofessional clinical, field, and Emergency Medical 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 265 and KNPE 266.

332. CLINICAL EXPERIENCE IN ATHLETIC TRAINING II (3). Preprofessional 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 265.

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, KNPE 226, and physical education major or minor.

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. PRQ: Physical education major.

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: KNPE 340, KNDN 220, successful completion of the ILTS Test of Academic Proficiency, criminal background check, minimum 2.75 GPA, and proof of TB clearance. CRQ: KNPE 335.

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.

346. METHODS OF GROUP FITNESS INSTRUCTION (3). Skill and knowledge necessary to instruct land and aquatic group fitness classes. Includes lecture and practical application. PRQ: Declared kinesiology major or minor.

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: Physical education major or dance minor.

350. PRINCIPLES AND TECHNIQUES OF RESISTANCE TRAINING (3). Fundamental techniques of resistance training applied to development of muscular fitness. Assessment of muscular fitness and development of personal resistance training programs. Theory and application of resistance training, including program development for a variety of populations. PRQ: Declared kinesiology major or minor.

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.

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.

364. FITNESS EDUCATION METHODS FOR K-12 STUDENTS (3). Teaching methods using a fitness education model, development and assessment of personal fitness plans. Create block, unit, and lesson plans for curriculum development for learners' health-related fitness from grades K-12 using Illinois and NASPE standards. CRQ: KNPE 452.

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. Grade of C or better required in this course for student teaching. PRQ: KNPE 335 and physical education major or minor.

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. Grade of C or better required in this course for student teaching. PRQ: KNPE 335 and physical education major or minor.

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). Grade of C or better required in this course for student teaching. PRQ: KNPE 335 and physical education major or minor.

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. Grade of C or better required in this course for student teaching. PRQ: KNPE 335 and physical education major or minor.

374. COACHING FAST-PITCH SOFTBALL (2). Individual skills and team techniques, rules, and strategies of fast-pitch softball. Emphasis on coaching and team management.

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.

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.

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.

379. THEORY AND PRACTICE OF COACHING GOLF (2). Coaching and training of golf athletes. Emphasis on advanced swing analysis and team management.

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.

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.

384. THEORY AND PRACTICE OF COACHING TRACK AND FIELD (2). Knowledge of standard track and field events. Methods and analysis of teaching skill development and performance. Rules, officiating, and meet organization.

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.

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.

399. HONORS SEMINAR (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Admission to University Honors Program or departmental Honors Program.

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.

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: KNPE 343, KNPE 446, successful completion of the ILTS Basic Skills Test and minimum 2.75 GPA. CRQ: KNPE 467.

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.

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.

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. PRQ: KNPE 323.

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. PRQ: KNPE 322.

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 323.

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 322.

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.

443. PRINCIPLES OF EXERCISE FOR ACUTE AND CHRONIC CONDITIONS (3). Principles and application of exercises for selected skeletal and muscular dysfunction. PRQ: BIOS 311 or BIOS 357.

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 educator licensure 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; declared athletic training or kinesiology major.

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: Successful completion of the ILTS Test of Academic Proficiency and a minimum 2.75 GPA. PRQ: KNPE 343.

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.

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.

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 mathematics core competency, excluding MATH 201.

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.

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.

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.

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.

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.

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.

462. CLINICAL EXERCISE PHYSIOLOGY (4). Theory, techniques, and procedures of graded exercise stress testing for diagnostic and functional assessment of individuals. PRQ: A grade of C or better in KNPE 452.

463. EXERCISE AND PHYSICAL ACTIVITY ACROSS THE LIFESPAN (3). Examination of the characteristics, physiological responses, and exercise adaptations for a range of populations. Emphasis on modifications and benefits of exercise related to functional limitation for those with a variety of conditions across the lifespan. PRQ: KNPE 452. CRQ: One semester hour in KNPE 493.

464. SCIENTIFIC BASIS OF EXERCISE TESTING, PRESCRIPTION, AND PROGRESSION (3). Design of exercise prescription and progression of the programs throughout the lifespan. PRQ: A grade of C or better in KNPE 452.

465. PHYSICAL ACTIVITY PROGRAMMING, PROMOTION, IMPLEMENTATION, AND EVALUATION (3). Design, preparation, development, and administration of physical activity interventions and physical fitness programs throughout the lifespan. PRQ: A grade of C or better in KNPE 452.

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. S/U grading. CRQ: KNPE 421 and consent of department.

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 468.

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 466.

470. HIGH PERFORMANCE DEVELOPMENT (4). Analysis of theory and current practice elements necessary to improve athletic performance. Foundational knowledge in human physiology and biomechanics applied to principles of speed, agility, power, flexibility, and technique development specific to individuals' goals. Development of safe practices for training individuals with a variety of experience and background. PRQ: A grade of C or better in KNPE 452.

472. PERIODIZATION FOR PERFORMANCE ENHANCEMENT (3). Principles of periodization applied to a performance enhancement setting. Theoretical understanding of program variables, including: cycles and periods, peaking for competition, and rest and recovery. Assessment of training programs based on performance requirements. PRQ: A grade of C or better in KNPE 452.

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: KNPE 323.

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.

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 "Educator Licensure Requirements." S/U grading. PRQ: Minimum 2.75 GPA, grade of C or better in KNPE 467, KNPE 468, KNPE 490, and KNPE 365 or KNPE 366 and KNPE 367 or KNPE 368.

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 "Educator Licensure Requirements." S/U grading. PRQ: Minimum 2.75 GPA, grade of C or better in KNPE 467, KNPE 468, KNPE 490, and KNPE 365 or KNPE 366 and KNPE 367 or KNPE 368.

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 "Educator Licensure Requirements." S/U grading. PRQ: Minimum 2.75 GPA, grade of C or better in KNPE 467, KNPE 468, KNPE 490, and KNPE 365 or KNPE 366 and KNPE 367 or KNPE 368.

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.

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 344 required only for B.S.Ed. physical education majors. CRQ: KNPE 492.

491. **THERAPEUTIC EXERCISE (3).** Principles and application of exercises for selected skeletal and muscular dysfunction. PRQ: BIOS 311 or BIOS 357 and 2.50 GPA.

492. **SPECIAL PHYSICAL EDUCATION CLINIC PRACTICUM (1-2).** 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.

493. **SUPERVISED CLINICAL EXPERIENCE IN EXERCISE GERONTOLOGY (1-3).** Implementing an exercise program for apparently healthy adult populations and medically approved older adults with limitations. Off-campus practicum. Students may register for a maximum of 3 semester hours. PRQ: Athletic training or kinesiology major or minor, KNPE 443 or KNPE 491.

494. **INTERNSHIP IN KINESIOLOGY (1-6).** Internship experience for students in B.S. degree program in kinesiology. May be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Minimum overall 2.15 GPA, minimum 2.50 GPA in required courses in the major, and consent of department.

495. **WORKSHOP IN PHYSICAL EDUCATION (1-3).** 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.

496. **SEMINAR IN SPECIAL TOPICS (1-3).** Topics announced. May be repeated to a maximum of 9 semester hours when topic varies. PRQ: Junior standing and consent of department.

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.

498. **INDEPENDENT STUDY (1-3).** 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)

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 301 or consent of department.

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: At least junior standing or consent of instructor.

442. **PROMOTION OF SPORT AND FITNESS PROGRAMS (3).** Principles of organizing and promoting events and activities associated with sports and fitness. PRQ: At least junior standing or consent of instructor.

486. **INTERNSHIP IN SPORT MANAGEMENT (1-6).** May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

492. **SEMINAR IN SPORT MANAGEMENT (3).** Designed to meet the needs of particular students for specialized information. Topics announced. PRQ: At least junior standing or consent of instructor.

497. **INDEPENDENT STUDY IN SPORT MANAGEMENT (1-3).** 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, professor, chair

Rodney Caughron, Ph.D., University of Iowa, associate professor

Constance Fox, Ed.D., University of Georgia, professor

Clersida Garcia, Ph.D., Michigan State University, associate professor

Luis E. Garcia, Ph.D., Michigan State University, associate professor

Todd Gilson, Ph.D., Michigan State University, assistant professor

Ethel Gregory, Ph.D., University of New Mexico, assistant professor

Steven Howell, Ph.D., Purdue University, assistant professor

Jinhong Jung, Ph.D., University of Georgia, associate professor

So-Yeun Kim., Ph.D., Oregon State University, associate professor

Marilyn A. Looney, P.E.D., Indiana University, professor

F. Jenny Parker, Ed.D., University of Massachusetts, associate professor

William A. Pitney, Ed.D., Northern Illinois University, professor

James Ressler, Ph.D., Ohio State University, assistant professor

Amanda Salacinski, Ph.D., University of Pittsburgh; associate professor

Gretchen Schlabach, Ph.D., University of Maryland, professor

Robert Wilson, II, Ph.D., University of Wisconsin, Milwaukee, assistant professor

Paul Wright, Ph.D., University of Illinois at Chicago, associate professor

Lauriece Zittel, Ph.D. Oregon State University, associate professor

Department of Leadership, Educational Psychology and Foundations (EPFE, EPS, LEBM, LEEA, TLCI)

The Department of Leadership, Educational Psychology and Foundations offers courses in curriculum and instruction, 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 educator licensure. The department also offers a course in education in a pluralistic society as part of the university's general education offerings.

Certificates of Undergraduate Study

Foundations of Educational Studies (12)

This interdisciplinary certificate enables students to draw on a variety of disciplinary perspectives and research methodologies when studying educational theories, policies, and practices. It allows students to focus their examination on, among other topics, the origins and organization of knowledge, education and schools; prominent educational philosophies or the work of an individual thinker; the interconnectedness of race, gender, and socioeconomic class and the effect on learning; and educational policies. This certificate is designed for those students—whether they are future teachers, parents, researchers, policymakers, or informed citizens—who seek a richer understanding of education and schools and who wish to delve more deeply into educational policies and practices.

Students will work closely with faculty members in the Foundations of Education program area to develop an appropriate course of study. In fulfilling the requirements for this certificate, students will use the tools and disciplinary perspectives at the heart of Foundations of Education: philosophy, history, and sociology. The capstone for the certificate is the independent study, the internship, the workshop, or the capstone course in the student's major. The independent study may be a research project, a service project, or a creative and artistic project. The internship or workshop is designed for those students who wish to assist a faculty member with teaching a particular course in the Foundations of Education program area.

Students may elect to specialize in one disciplinary area or to embrace a broader approach that draws from the different disciplinary perspectives. Students will develop their plans of study in consultation with a certificate adviser. With the consent of the student's major department, courses applied toward the certificate may meet major and general education requirements. Study toward the certificate is open to any NIU undergraduate student with consent of department. All requirements for the certificate must be completed within six calendar years.

Requirements

The certificate of undergraduate study in foundations of education requires a minimum of 12 semester hours. Course work from the list below is chosen in consultation with certificate adviser.

Three of the following:

- *EPFE 201 - Education as an Agent for Change (3)
- EPFE 321- History of American Education (3)
- EPFE 400 - Foundations of Education (3)
- EPFE 410 - Philosophy of Education (3)
- EPFE 492 - Special Topics in Foundations of Education (3)
- One 300 - or 400-level course in the department of history, philosophy, or sociology

One of the following:

- EPFE 486 - Internship in Educational Foundations (3)
- EPFE 490 - Workshop in Education (3)
- EPFE 497 - Independent Study (3)
- Relevant capstone course in the major (3)

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 (12)

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 486 or EPFE 490.

- EPFE 410 - Philosophy of Education (3)
- EPFE 486 - Internship in Education (3)
- EPFE 490 - Workshop in Education (3)
- EPFE 492 - Special Topics in Foundations of Education (3)
- EPFE 497 - Independent Study (3)
- EPFE 510 - Philosophical Foundations of Education (3)
- An upper-division course taken in the Department of Philosophy (3)

Course List

Curriculum and Instruction (TLCI)

300. The Community: An Educational Resource (2). Study of natural, built and built human resources within communities available for educational purposes.

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.

340. Elementary School Curriculum (3). Introduction to elementary school curriculum and study of the relationship of theory to practice.

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. PRQ: Junior standing.

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.

482. Clinical Experiences in Outdoor Teacher Education (1-3). Clinical experiences in natural and built environments. May not be used in lieu of or for student teaching credit.

483. Outdoor Education/Laboratory Experience (1). Laboratory work outside the classroom required. PRQ: TLEE 383, student teaching, and senior standing.

490. Workshop in Curriculum Leadership (1-3). 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.

491. Special Topics in Secondary Education (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

492. Special Topics in Curriculum and Instruction (1-3).

A. Curriculum

B. Professional Development Leadership

Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

493. Workshop in Outdoor Education (1-3). 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.

495. Workshop in Secondary Education (1-3). 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.

497. Independent Study (1-3).

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.

Educational Administration (LEEA)

490. WORKSHOP IN EDUCATIONAL ADMINISTRATION (1-3). 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.

492. SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1-3). 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)

282X. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: ELEMENTARY EDUCATION (1-2). *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.

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.

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.

307. DEVELOPMENT OF THE ADOLESCENT (3). Intellectual, social, personality, and physical development of the adolescent. Emphasis on implications for school practice. PRQ: PSYC 102.

382. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCE: MIDDLE LEVEL EDUCATION (1-2). Pre-student-teaching practicum. Observation and analysis of curriculum, instruction, assessment, and behavior management practices in multicultural middle grades classrooms (grades 5-8). Design, implementation, and evaluation of lesson plans. Requires a minimum of 16 clock hours per semester hour. May be repeated to a maximum of 4 semester hours. S/U grading. PRQ: Consent of department. CRQ: EPS 419.

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 needing K-12 educator licensure. PRQ: PSYC 102, minimum GPA of 2.50, at least junior standing, and admission to an educator licensure program. CRQ: Documented clinical experience or supervised participation in schools.

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 educator licensure in grades 5-12 only. PRQ: Minimum GPA of 2.50, at least junior standing, and admission to an educator licensure program. CRQ: Clinical experience or supervised participation in schools.

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: PSYC 102.

426. FOUNDATIONS OF PSYCHEDELIC STUDIES IN EDUCATION (3). *Crosslisted as EPFE 426X*. An exploration of psychological, social, historical, philosophical, and anthropological implications of psychedelics for educational practice and policy.

450. CLASSROOM MANAGEMENT (2). Applications of motivation and management principles and procedures to maintain a positive learning environment in classrooms.

454. THE GIFTED STUDENT (3). Characteristics of the gifted. Emphasis on identification, growth and development, creativity, motivation, guidance, and evaluation of the gifted.

490. WORKSHOP IN EDUCATION (1-3). 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.

492. SPECIAL TOPICS IN EDUCATIONAL PSYCHOLOGY (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1-3). 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)

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.

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. PRQ: Sophomore standing.

355. SOCIOLOGY OF SCHOOLING (3). Introduction to the sociological study of schooling. Examination of the role of schools in modern society, the organizational features of schools, education as an institution and its relation to other social institutions, and the relationship between schooling and social inequality.

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.

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.

426X. FOUNDATIONS OF PSYCHEDELIC STUDIES IN EDUCATION (3). *Crosslisted as EPS 426*. An exploration of psychological, social, historical, philosophical, and anthropological implications of psychedelics for educational practice and policy.

486. INTERNSHIP IN EDUCATIONAL FOUNDATIONS (1-3). Application of the principles of foundations of education in a practical setting. Instruction supervised by a foundations of education professor. May be repeated to a maximum of 9 semester hours.

490. WORKSHOP IN EDUCATION (1-3). 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.

492. SPECIAL TOPICS IN FOUNDATIONS OF EDUCATION (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1-3). 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)

490. WORKSHOP IN EDUCATION (1-3). 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.

492. SPECIAL TOPICS IN SCHOOL BUSINESS MANAGEMENT (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1-3). 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

Patrick Roberts, Ph.D., University of Illinois at Chicago, associate professor, chair

Helen Brantley, Ph.D., Columbia University at New York, professor
Kerry Burch, Ph.D., University of Hawaii at Manoa, associate professor

Jon G. Crawford, J.D., Ph.D., Iowa State University, associate professor

Joseph Flynn, Ph.D., Michigan State University, associate professor

Bradley Hawk, Ed.D., University of Illinois, Urbana-Champaign, assistant professor

Christine Kiracofe, Ed.D., University of Georgia, associate professor

Rosita Lopez, Ed.D., Northern Illinois University, associate professor

Leslie A. Sassone, Ph.D., Purdue University, associate professor

Jennifer Schmidt, Ph.D., University of Chicago, associate professor

David Shernoff, Ph.D., University of Chicago, associate professor

Hidetada Shimizu, Ed.D., Harvard University, associate professor

Lee Shumow, Ph.D., University of Wisconsin, Distinguished Teaching Professor

Kelly H. Summers, Ph.D., Northern Illinois University, assistant professor

Cynthia Taines, Ph.D., University of Wisconsin, associate professor

Stephen M. Tonks, Ph.D., University of Maryland, College Park, associate professor

Carolyn Vander Schee, Ph.D., Georgia State University, associate professor

Marc VanOverbeke, Ph.D., University of Wisconsin, associate professor

Teresa Wasonga, Ed.D., University of Missouri, associate professor

Elizabeth Wilkins, Ph.D., Southern Illinois University, professor

Department of Literacy and Elementary Education (LTIC, LTLA, LTRE, TLEE)

Admission to the major in elementary education is limited. See "Limited Admissions and Limited Retention Requirements" in this catalog.

The Department of Literacy and Elementary Education offers course work in elementary education, and literacy, intercultural, and language education, including work in reading, the language arts, children's literature, bilingual education, English as a second language, social studies, science education, elementary teacher education, and multicultural education.

The department offers the B.S.Ed. degree with a major in elementary education, which meets State of Illinois approval.

The B.S.Ed. degree in elementary education qualifies students for an Illinois Elementary Educators License, which enables them to teach in elementary schools. Students may also earn middle school endorsements by successfully completing EPS 419 and TLCI 422.

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. All course requirements (in the department and outside of the department) require a grade of C or better.

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (41-42)

LTIC 301 - Teaching with a Multicultural Perspective (3)
 LTIC 420 - Methods and Materials for Teaching English Language Learners in the Content Areas (3)
 LTLA 301 - Writing for Prospective Teachers (1)
 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 350 - Organizing for Effective Elementary Reading Instruction (3)
 TLEE 282 - Educational Participation in Clinical Experiences: Elementary Education (1-2)
 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)
 TLEE 385 - Differentiation in Elementary School Instruction: Field Experience with Diverse Learners (1)
 TLEE 461 - Seminar in Elementary School Teaching (1)
 (must be taken concurrently with TLEE 485)
 TLEE 485 - Student Teaching (10)

Requirements outside Department (52)

ARTE 383 - Teaching Art in Elementary Schools (3),
 OR MUED 360 - 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 - Classroom Assessment in Elementary Education (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)
 *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)
 SESE 240 - Introduction to Special Education (2)
 SESE 456 - Collaboration for Inclusive Teaching and Learning (3)
 TLCI 300 - The Community: An Educational Resource (3)
 TLCI 450 - Classroom Management (2)

Total Hours for a Major in Elementary Education: 93-94

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 educator licensure 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. Elementary education students receiving a D, F, U, or I in any course in the third professional semester will not be permitted to enroll or receive credit for any course in the fourth professional semester until the deficiency has been removed with an S, C, or better.

Certificate of Undergraduate Study

Middle School Literacy

This certificate is designed to prepare teacher candidates with a set of courses focused on literacy instruction that is developmentally appropriate for students at the middle school level. Students completing this certificate will acquire the skills

* Available for general education credit.

and techniques for developing and assessing literacy instruction, and methods for integrating literacy instruction across the middle school curriculum.

The certificate of undergraduate study in middle school literacy is open to all students admitted to degree or non-degree study at Northern Illinois University. Students who want to pursue this certificate must receive approval and advisement from the coordinator. Those who want to earn the Middle School endorsement from the Illinois State Board of Education should contact the certificate coordinator for further information. Students must maintain good academic standing in the university, achieve a minimum grade of C in each certificate course, and complete all certificate course work within six calendar years.

Requirements (15)

LTLA 350 - Language Arts in the Middle School (3)
 LTLA 363 - Young Adult Literature in a Multicultural Society (3)
 LTRE 305 - Teaching Reading in the Middle School (3)
 LTRE 311 - Content Area Literacy Instruction (3)
 LTIC 420 - Methods and Materials for Teaching English Language Learners in Content Areas (3)

Course List

Literacy (LTCY)

100. 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 diagnostic as well as summative evaluations. Units monitored by members of the faculty. May be repeated to a maximum of 6 semester hours. S/U grading.

300. FOUNDATIONS OF INSTRUCTION IN READING, WRITING, AND THE OTHER LANGUAGE ARTS (4). Developmental reading, writing, and the other language arts (speaking, listening, viewing, and visually representing) for elementary students. Instructional approaches and methods of organizing reading/writing/language arts instruction. PRQ: For special education majors only, GPA of at least 2.5, SESE 240.

Bilingual/ESL (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.

400. INTRODUCTION TO TEACHING ENGLISH LANGUAGE LEARNERS (3). Survey of practices and principles for teaching English language learners in multilingual contexts.

415. READING FOR BILINGUAL POPULATIONS (3). Theoretical bases, approaches, materials, and strategies facilitating the development and assessment of second language reading for bilingual school populations.

420. METHODS AND MATERIALS FOR TEACHING ENGLISH LANGUAGE LEARNERS IN THE CONTENT AREAS (3). Examine, apply, and assess instructional approaches and materials for teaching English language learners (ELLs) in school settings. Focus on collaborative teaching across the content areas.

435. TEACHING ENGLISH LANGUAGE LEARNERS IN BILINGUAL PROGRAMS: METHODS AND MATERIALS (3). Examination, evaluation, and application of instructional approaches and curricular materials for English language learners in bilingual education programs.

445. APPLIED LINGUISTICS FOR TEACHERS OF ENGLISH LANGUAGE LEARNERS (3). Applications of linguistic principles in teaching and learning of English language learners.

447. ASSESSMENT OF ENGLISH LANGUAGE LEARNERS (3). Assessment of the language needs of English language learners at levels K-12; identification of language needs for instructional planning and placement.

Language Arts (LTLA)

301. WRITING FOR PROSPECTIVE TEACHERS (1). Use of English prose writing conventions in educational applications. PRQ: Consent of department.

305X. LANGUAGE DEVELOPMENT (3). *Crosslisted as COMD 305*. Overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence.

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 ILTS Test of Academic Proficiency.

350. LANGUAGE ARTS IN THE MIDDLE SCHOOL (3). Instructional applications, experiences, and assessment of the development of language arts teaching techniques and strategies at the middle school level.

361. LITERATURE FOR THE YOUNG CHILD (3). Role of literature in promoting language, cognition, and social development in young children (0-8 years old).

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.

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.

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.

439. CHILDREN'S LITERATURE FOR LINGUISTIC DIVERSITY (3). Historical and current perspectives of the role and implications for using children's literature in K-8 programs of instruction for linguistically diverse students.

Reading (LTRE)

100. COMMUNICATION SKILLS (READING) (1-3). Introduction to academic approaches to reading using a variety of text types and genres. Focus on improving comprehension strategies including interpretation, synthesis, and analysis. May be repeated once to a maximum of 4 semester hours. Open by permit only.

190. COLLEGE READING AND STUDY STRATEGIES (1-3). Introduction to college-level reading, learning, and study strategies, including note taking, test preparation, rehearsal, and vocabulary development. Focus on active reading, self-monitoring, and learning with a variety of academic texts. May be repeated to a maximum of 3 semester hours.

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.

231. TECHNIQUES OF LITERACY TUTORING (3). Methods and techniques for literacy tutoring. Development of tutorial resource materials.

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 ILTS Test of Academic Proficiency.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

490. **WORKSHOP IN EDUCATION (1-3).** 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.

497. **INDEPENDENT STUDY (1-3).** Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Elementary Education (TLEE)

282. **EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: ELEMENTARY EDUCATION (1-2).** *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.

342. **THE TEACHING OF SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3).** Development of effective social studies programs with emphasis on instructional methods and materials.

344. **TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3).** The application of theories, best practice and learning standards in the development of inquiry-based science instruction in the elementary program (K-9). Emphasis on the knowledge of the learner, instructional methods, and the application of pedagogical content knowledge. PRQ: GPA of at least 2.75 and junior standing.

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.

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.

385. **DIFFERENTIATION IN ELEMENTARY SCHOOL INSTRUCTION: FIELD EXPERIENCE WITH DIVERSE LEARNERS (1).** 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, as well as case study work required. S/U grading. PRQ: TLEE 382.

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.

461. **SEMINAR IN ELEMENTARY SCHOOL TEACHING (1).** Orientation to the teaching profession including school and community environment, professionalism, and effect of teaching on student learning. S/U grading. PRQ: TLEE 383, GPA of at least 2.75, and senior standing. CRQ: TLEE 485 and ETT 401B.

485. **STUDENT TEACHING (3-12).** Student teaching for one-half semester or one entire semester. Assignments to be arranged with the department. S/U grading. See "Educator Licensure Requirements." PRQ: TLEE 383 and MATH 402 or TLEE 402X.

490. **WORKSHOP IN ELEMENTARY EDUCATION (1-6).** 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.

492. SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. Independent Study (1-3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.

Literacy and Elementary Education Faculty

Jennifer Berne, Ph.D., Michigan State University, associate professor, chair

Sonya L. Armstrong, Ed.D., University of Cincinnati, associate professor

Chris L. Carger, Ph.D., University of Illinois, Chicago, professor

James A. Cohen, Ph.D., Arizona State University, assistant professor

Mayra C. Daniel, Ed.D., Illinois State University, associate professor

Laurie Elish-Piper, Ph.D., University of Akron, Distinguished Teaching Professor, Presidential Engagement Professor

Mary Beth Henning, Ph.D., Pennsylvania State University, associate professor

Sheryl L. Honig, Ph.D., University of Illinois, Chicago, assistant professor

Paul Kelter, Ph.D. University of Nebraska at Lincoln, Board of Trustees Professor

Melanie D. Koss, Ph.D., University of Illinois, Chicago, assistant professor

Susan L'Allier, Ed.D., Harvard University, associate professor

Michael Manderino, Ph.D., University of Illinois, Chicago, assistant professor

Dong-shin Shin, Ed.D., University of Massachusetts, Amherst, assistant professor

Eui-kyung Shin, Ph.D., University of South Carolina, associate professor

John Evar Strid, Ph.D., Northwestern University, assistant professor

Donna E. Werderich, Ed.D., Northern Illinois University, associate professor

Corrine M. Wickens, Ph.D., Texas A&M University, assistant professor

C. Sheldon Woods, Ph.D., Kansas State University, associate professor

Department of Special and Early Education (SEEC, SESE, SEVI)

Admission to the interdisciplinary major in early childhood studies is limited. See “Limited Admissions and Limited Retention Requirements” in this catalog.

The Department of Special and Early Education (SEED) offers the B.S. degree with an interdisciplinary major in early childhood studies, the B.S.Ed. degree with a major in special education, and undergraduate course work in early childhood and special education. State of Illinois approved and CAEP accredited programs leading to licensure are offered in early childhood 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 Special and Early Education and the School of Family, Consumer, and Nutrition Sciences.

The B.S.Ed. degree in special education is designed for those who plan to teach students with disabilities at the elementary, intermediate, and secondary level, leading to Type 10 Standard Special licensure. Completion of department and appropriate emphasis requirements leads to licensure by entitlement for teaching individuals with disabilities, either as Emphasis 1. Learning Behavior Specialist I, or Emphasis 2. Vision Impairments.

As part of educator licensure, 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 licensure (e.g., early childhood education, special education). Additional tests may be required before applying for Illinois educator licensure.

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.

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. Educator licensure requirements are deemed to be met only by obtaining a grade of C or better in courses using traditional ABCDF grading or an S in those professional or clinical courses in which S/U grading is used. An S is the equivalent to a C or better and a U is equivalent to a D or lower in educator licensure courses using S/U grading.

Interdisciplinary Major in Early Childhood Studies (B.S.)

The Department of Special and Early Education 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 licensure and 04 licensure with preschool special education approval. Graduates of the program qualify for Illinois Early Childhood Educator Licensure (04) enabling them to teach children from birth through grade three in Illinois public schools. Students pursuing 04 licensure 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 licensure 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 GPA of 2.50 in all professional education courses.

Students should carefully read the section entitled “Educator Licensure Requirements.”

As part of educator licensure, students will need to pass Illinois Certification Testing System (ILTS) examinations including the Test of Academic Proficiency (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 Special and Early Education 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis in 04 Licensure with Preschool Special Education Approval

Students who successfully complete the program will have completed all required ISBE and CAEP standards for educator licensure.

Core Requirements (61-65)

*EPFE 201¹ - Education as an Agent for Change (3)
 ETT 229¹ - Computers in Education (3) or pass the ETRA Skills Competency Examination (0)
 FCNS 230¹ - Child Development (3)
 FCNS 284¹ - Introduction to Family Relationships (3)
 FCNS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
 *HIST 260¹ - American History to 1865 (3),
 OR *HIST 261¹ - American History Since 1865 (3)
 LTLA 305X/COMD 305 - Language Development (3)
 LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3)
 *MATH 201¹ - Foundations of Elementary School Mathematics (3)
 *PHIL 231¹ - Contemporary Moral Issues (3)
 *PSYC 102¹ - Introduction to Psychology (3)
 SEEC 282 - Educational Participation in Clinical Experiences: Early Childhood Education (1-2)
 SEEC 340 - The Language Arts and Social Studies for the Primary Child (3)
 SEEC 343 - Teaching Science and Mathematics to Children Ages 5-8 (3)
 SEEC 382 - Practicum in Early Childhood Studies (3)
 SEEC 403 - Primary Curriculum (3)
 SEEC 430 - Preschool and Kindergarten Curriculum (3)
 SEEC 485A - Student Teaching in Preschool-Kindergarten (6)
 SEEC 485B - Student Teaching in Primary (6)
 SESE 240¹ - Introduction to Special Education (3)

Requirements in Department (21)

SEEC 300 - Observation and Assessment of Young Children (3)
 SEEC 401 - Play Development of the Young Child (3)
 SEEC 410 - Trends and Issues in Early Childhood Education (3)
 SEEC 425 - Democracy in the Early Childhood Classroom (3)
 SESE 423 - Observation and Assessment in Early Childhood Special Education (3)
 SESE 424 - Methods and Strategies for Promoting Development and Teaching Infants, Toddlers, and Young Children with Disabilities and Special Needs (3)
 SESE 426 - Working with and Supporting Families of Young Children with Disabilities and Special Needs (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 250¹ - 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)¹
 One general education physical science course (3-4)
 Either the biology or physical science course must include a laboratory

Total Hours for Emphasis in 04 Licensure with Preschool Special Education Approval: 101-105

Major in Special Education (B.S.Ed.)

To be admitted to teacher education in special education, students must have a minimum NIU GPA of 2.50 and must have successfully completed the ILTS Test of Academic Proficiency. To continue to enroll, students must maintain a minimum cumulative GPA of 2.50.

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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Licensure 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 licensure 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 educator licensure. Students who successfully complete the program requirements will have completed all required ISBE and CAEP standards for educator licensure.

Emphasis 1. Learning Behavior Specialist I

To be admitted to teacher education in Emphasis 1, Learning Behavior Specialist I, individuals who have earned the Associate of Arts in Teaching (A.A.T.) in Special Education must provide evidence of passing the Illinois Test of Academic Proficiency and have a minimum transfer GPA of 2.50, including grades of C or better in A.A.T. professional special education courses. The A.A.T. must include courses in Language Development and Introduction to Foundations of Reading. Students transferring to NIU with an A.A.T. in Special Education, who intend to pursue the Learning Behavior Specialist I program, must contact the undergraduate academic adviser no later than one year prior to admission to NIU. Failure to do so may result in a delay of registration for the initial block sequence of courses leading to the LBS I educator licensure.

To remain a major in special education, students must earn a grade of C or better in SESE 240, ETR 434, SESE 375, SESE 420, SESE 435, SESE 440, SESE 445, SESE 452, SESE 454, and SESE 455. In addition, students must earn a grade of S in the clinical courses SESE 260, SESE 466, SESE 467, and SESE 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).

This emphasis leads to Illinois educator licensure as a learning behavior specialist I.

Requirements in Department (53)

SESE 240¹ - Introduction to Special Education (3)
 SESE 260¹ - Service Learning Field Experience in Special Education (1)
 SESE 375 - Linking Student Characteristics to Educational Interventions (3)
 SESE 420 - Accessing the General Curriculum: Elementary I (3)
 SESE 435 - Accessing the General Curriculum: Elementary II (3)
 SESE 440 - Accessing Middle School/Secondary General Curriculum (3)
 SESE 445 - Applied Curriculum (3)
 SESE 452 - Assistive Technology/Multiple Disabilities (3)
 SESE 454 - Classroom Management for Special Educators (3)
 SESE 455 - Social/Emotional Behavior Support and Management (3)
 SESE 458 - Vocational Preparation and Transition Planning for Adolescents with Disabilities (3)
 SESE 465 - Consultation and Collaboration Skills for Special Educators (3)
 SESE 466 - Clinical Experience in Special Education: Elementary (2)
 SESE 467 - Clinical Experience in Special Education: Middle/Secondary (2)

* Available for general education credit.

¹ Not required for students who have earned an A.A.T. in Early Childhood.

SESE 468 - Clinical Experience in Special Education: Developmental Disabilities (2)
 SESE 483 - Student Teaching in Elementary Special Education: Learning Behavior Specialist (6)
 SESE 484 Student Teaching in Secondary Special Education: Learning Behavior Specialist (6)
 SESE 494 - Capstone Seminar in Special Education (1)

Requirements outside Department (45)

COMD 220¹ - Introduction to Communicative Disorders (3)
 *EPFE 201¹ - 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 405¹ - Issues in Human Development in the Elementary Through High School Years (3)
 ETR 434 - Assessing Students with Special Needs (3)
 ETT 229¹ - Computers in Education (3)
 ETT 402 - Teaching and Learning with Technology (3)
 *GEOG 202¹ - World Regional Geography (3)
 *HIST 260¹ - American History to 1865 (3)
 *HIST 261¹ - American History Since 1865 (3)
 LTLA 341¹ - Language Arts in the Elementary School (3)
 LTRE 300¹ - Elementary School Developmental Reading Programs (3)
 *MATH 201¹ - Foundations of Elementary School Mathematics (3)
 *POLS 100¹ - American Government and Politics (3),
 OR *POLS 150 - Democracy in America (3)
 *PSYC 102¹ - Introduction to Psychology (3)

Other Requirements (22-26)

General requirements for educator licensure, in addition to
 *MATH 201, *PSYC 102, and EPFE 201 or *BKST 211 or *ILAS 123
 KNPE 490 - Adapted Physical Education (3) AND KNPE 492 -
 Special Physical Education Clinic Practicum (1),
 OR SESE 453 - Transition Planning Using Technology (2-3)

Total Hours for Emphasis 1, Learning Behavior Specialist I: (122-124)

Emphasis 2. Vision Impairments

Emphasis 2 leads to Illinois educator licensure in the area of blind and visually impaired. To be admitted into the teacher education program in Vision Impairments, students must have a minimum cumulative NIU GPA of 2.50 and must have successfully completed the ILTS Test of Academic Proficiency. To remain in the program, students must maintain a minimum cumulative GPA of 2.50.

Requirements in Department (55)

SESE 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)
 SEVI 400 - Education of Students with Visual Impairments (3)
 SEVI 410 - Anatomy, Pathology, and Functioning of the Eye (3)
 SEVI 420 - Literary Braille (3)
 SEVI 421 - Advanced Braille (3)
 SEVI 440 - Communication Systems Used By Persons with Visual Impairments (3)
 SEVI 442 - Instructional Systems for Teaching Students Who Are Visually Impaired (3)
 SEVI 430 - Basic Orientation and Mobility for Teachers of Persons with Visual Impairments (3)
 SEVI 441 - Instructional Systems for Use of Low Vision in Educational Settings (3)
 SEVI 450 - Assistive Technology for Individuals with Visual Impairments (3)

SEVI 480 - Field Experience in Special Education (4)
 SEVI 484 - Student Teaching in Elementary Special Education: Vision Impairments (6)
 SEVI 485 - 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)

Other Requirements (32)

General requirements for educator licensure, in addition to
 *MATH 201, *PSYC 102, and *EPFE 201, or *BKST 211, or
 ILAS 123

Total Hours for Emphasis 2, Vision Impairments: 123

Course List

Early Childhood Education (SEEC)

282. EDUCATIONAL PARTICIPATION IN CLINICAL EXPERIENCES: EARLY CHILDHOOD EDUCATION (1-2). 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.

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.

304. INTRODUCTION TO COMMUNITY EDUCATION: CHILDREN (1). Orientation to educational programs for children in community organizations and other non-formal settings. Introduction to the history, theory, and practice of fostering self-activity and learning out of school. Includes a field component. Criminal Background Check required. CRQ: SESE 304 and KNPE 304.

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.

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.

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.

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.

* Available for general education credit.

¹ Not required for students who have earned an A.A.T. in Special Education.

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.

410. TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION (3). Focus on philosophical and psychological aspects of early childhood education as related to contemporary society.

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.

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.

485A. STUDENT TEACHING IN PRESCHOOL-KINDERGARTEN (3-12). 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 "Educator Licensure Requirements." PRQ: SEEC 382.

485B. STUDENT TEACHING IN PRIMARY (3-12). 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 "Educator Licensure Requirements." PRQ: SEEC 382.

490. WORKSHOP IN EARLY CHILDHOOD EDUCATION (1-3). 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.

492. SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION (1-3). Topics announced. May be repeated to a maximum of 9 semester hours when topic varies.

497. INDEPENDENT STUDY (1-3). Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours.

Special Education (SESE)

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 licensure only.

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.

304. INTRODUCTION TO COMMUNITY EDUCATION: ADULTS WITH SPECIAL NEEDS (1). Orientation to educational programs for adults with special needs in community organizations and other non-formal settings. Introduction to the history, theory, practices, and principles of working with adults with special needs within the context of community agencies. Includes a field component. Criminal Background Check required. CRQ: SEEC 304 and KNPE 304

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: SESE 240.

410. POSITIVE BEHAVIOR SUPPORTS FOR EQUALITY, ACCESS, AND STUDENT DEVELOPMENT (3). Survey of principles of effective behavior management to promote appropriate student academic and social behavior and prevent and decrease challenging behavior in school settings. Enables middle and secondary preservice educators to design classroom environments using Response to Intervention (RtI) strategies, Positive Behavior Intervention and Supports (PBIS), socioemotional learning standards, and culturally sensitive pedagogy. Meets socialemotional learning (SEL) and Illinois Professional Teaching Standards (PTS) for classroom management and socio-emotional learning. PRQ: Junior standing or consent of department.

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: SESE 375, LTLA 341, and LTRE 300.

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.

423. OBSERVATION AND ASSESSMENT IN EARLY CHILDHOOD SPECIAL EDUCATION (3). Recommended practices and strategies for conducting formal and informal assessment of young children including physical, communication, early academic and academic, adaptive, and social-emotional development as well as assessment of center/classroom-based settings and natural environments. Includes data analysis and data-based decision making. PRQ: SESE 240.

424. METHODS AND STRATEGIES FOR PROMOTING DEVELOPMENT AND TEACHING INFANTS, TODDLERS, AND YOUNG CHILDREN WITH DISABILITIES AND SPECIAL NEEDS (3). Methods, strategies and recommended practices and evidence-based curricula for promoting development and teaching infants, toddlers, and young children with disabilities and special needs in classroom and natural settings. PRQ: SESE 240.

426. WORKING WITH AND SUPPORTING FAMILIES OF YOUNG CHILDREN WITH DISABILITIES AND SPECIAL NEEDS (3). Strategies to promote positive and productive family/ professional relationships and family centered practices for working with and supporting families of young children with disabilities and special needs (birth to eight years).

427. ISSUES AND RECOMMENDED PRACTICES IN EARLY CHILDHOOD SPECIAL EDUCATION (3). Trends, issues, and concerns, and recommended practices in the field of early intervention/early childhood special education (birth to eight years of age). In-depth analysis of current issues in the field related to children with disabilities and special needs and children at risk and their families, service providers, and other early childhood professionals. PRQ: SESE 423 and SESE 424 and SESE 426.

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: SESE 375.

440. ACCESSING MIDDLE SCHOOL/SECONDARY GENERAL CURRICULUM (3). Curricula, methods, and materials as they relate to teaching secondary-aged students with high-incidence disabilities. Emphasis on instructional procedures to teach independent learning skills, curriculum and instructional adaptations. PRQ: SESE 375.

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.

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.

453. **TRANSITION PLANNING USING TECHNOLOGY (2-3).** Strategies for using technology to promote self-determination and self-advocacy among individuals with developmental disabilities. Emphasis on preference assessment, goal-setting, and action-planning for transition. Field-based activities are required.

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 preservice special educators to design classroom environments, conduct functional assessments, and implement group and individualized behavior programs in classroom settings. PRQ: SESE 375.

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: SESE 454.

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, accommodations and modifications for students, universal design, assistive technology, and effective inclusive practices. Includes field-based assignments. PRQ: SESE 240.

457. **METHODS FOR INCLUDING MIDDLE AND SECONDARY STUDENTS WITH EXCEPTIONALITIES IN THE GENERAL EDUCATION CLASSROOM (3).** Designed to provide preservice and inservice educators with knowledge and skills necessary to adaptations for middle and high school learners with exceptionalities in the general education classroom. Provides an overview of relevant laws and legal issues, evidence-based methods, assistive technologies, collaboration skills, ways of differentiating lessons, and information about disabilities and exceptionalities. Does not count toward degree program in special education. PRQ: Junior standing and PHHE 220 or ARTE 344 or FCNS 240 or ILAS 201 or MUSC 275.

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.

465. **CONSULTATION AND COLLABORATION SKILLS FOR SPECIAL EDUCATORS (3).** Strategies for effectively consulting and collaborating with general education teachers, administrators, paraprofessionals, families, teams, and community personnel. Emphasis on effective interpersonal skills, conflict resolution, problem solving, facilitating meetings, co-teaching, and academic and behavioral methods for supporting inclusionary practices. Includes field-based assignments. PRQ: SESE 375.

466. **CLINICAL EXPERIENCE IN SPECIAL EDUCATION: ELEMENTARY (2).** Pre-student teaching clinical experience. Observation and instruction in diverse special and regular elementary education settings where students with high-incidence disabilities receive special education services. Activities include design, implementation, and evaluation of lesson plans. S/U grading. PRQ: A grade of C or better in COMS 100, Math 201, ENGL 103, and ENGL 104.

467. **CLINICAL EXPERIENCE IN SPECIAL EDUCATION: MIDDLE/SECONDARY (2).** Pre-student teaching clinical experience. Observation and instruction in diverse special and/or regular middle or secondary 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: SESE 440.

468. **CLINICAL EXPERIENCE IN SPECIAL EDUCATION: DEVELOPMENTAL DISABILITIES (2).** 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.

483. **STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION: LEARNING BEHAVIOR SPECIALIST I (6).** Supervised student teaching of exceptional students in diverse cultural and educational settings. All students must satisfy the regulations governing student teaching. S/U grading. PRQ: Completion of professional education and related course work; or consent of department.

484. **STUDENT TEACHING IN SECONDARY SPECIAL EDUCATION: LEARNING BEHAVIOR SPECIALIST I (6).** Supervised student teaching of exceptional students in diverse cultural and educational settings. Students must satisfy the regulations governing student teaching. S/U grading. PRQ: Completion of professional education and related course work; or consent of department.

489. **INTERNSHIP IN COMMUNITY EDUCATION (6).** Work individually in a community organization that offers educational programs for children, youth, and/or adults under the guidance of a staff member from that setting and a university supervisor.

490. **WORKSHOP IN SPECIAL EDUCATION (1-3).** 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.

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. S/U grading. PRQ: Senior standing.

497. **INDEPENDENT STUDY (1-6).** Independent study under direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Vision Impairments (SEVI)

400. **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. PRQ: Consent of department.

410. **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. PRQ: Consent of department.

420. **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. PRQ: Consent of department.

421. **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: SEVI 420 or consent of department.

430. BASIC ORIENTATION AND MOBILITY FOR TEACHERS OF PERSONS WITH VISUAL IMPAIRMENTS (3). Emphasis on concept development, sensory skills, organizational techniques, precane skills, and a full range of mobility options. Exploration of historical background and current issues in orientation and mobility. Includes blindfold and simulator experience. PRQ: Consent of department.

440. 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: SEVI 410 and SEVI 420 or consent of department.

441. 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: SEVI 410 or consent of department.

442. 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: SEVI 400 and SEVI 410 and SEVI 420 and SEVI 421 and SEVI 430 and SEVI 440 and SEVI 441 and SEVI 450 and SEVI 481; or consent of department.

443. 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. Emphasis on home, school, work, and leisure skills. Two hours lecture and two hours laboratory per week.

447. COLLABORATION AMONG SCHOOL PROFESSIONALS WORKING WITH STUDENTS WITH VISUAL AND MULTIPLE IMPAIRMENTS (3). Specific techniques related to inservice training, and team teaching in inclusive settings. Interrelationships between and among families and specialists working with individuals with visual and multiple impairments in the educational system. PRQ: Consent of department.

450. ASSISTIVE TECHNOLOGY FOR INDIVIDUALS WITH VISUAL IMPAIRMENTS (3). Includes laboratory experience with selected hardware and software. May not be repeated as TLSE 579. PRQ: SEVI 420.

480. FIELD EXPERIENCE IN SPECIAL EDUCATION: VISION IMPAIRMENTS (4). Supervised observation and teacher-directed experiences with children who are visually impaired in culturally and educationally diverse settings. PRQ: Consent of department.

484. STUDENT TEACHING IN ELEMENTARY SPECIAL EDUCATION: VISION IMPAIRMENTS (6). Supervised observation and teacher-directed experiences with students who are visually impaired in cultural and educational settings. Students must satisfy the regulations governing student teaching. PRQ: Completion of professional education and related course work; or consent of department.

485. STUDENT TEACHING IN SECONDARY SPECIAL EDUCATION: VISION IMPAIRMENTS (6). Supervised observation and teacher-directed experiences with students who are visually impaired in cultural and educational settings. Students must satisfy the regulations governing student teaching. PRQ: Completion of professional education and related course work, or consent of department.

Special and Early Education Faculty

Barbara Schwartz-Bechet, Ed.D., Columbia University: Teachers College, professor, chair

Erika Blood, Ph.D., University of Washington, assistant professor
Jeffrey Chan, Ph.D., University of Texas at Austin, assistant professor

Lynette K. Chandler, Ph.D., University of Kansas, professor

Gregory Conderman, Ed.D., University of Northern Colorado, professor

Gaylan G. Kapperman, Ed.D., University of Northern Colorado, professor emeritus

Stacy Kelly, Ed.D., Northern Illinois University, assistant professor

Maylan Dunn-Kenney, Ph.D., University of Oklahoma, associate professor

Laura Hedin, Ph.D., University of Illinois at Champaign-Urbana, associate professor

Jesse W. Johnson, Ed.D., Northern Illinois University, associate professor

Sarah Johnston-Rodriguez, Ph.D., University of Wisconsin at Madison, associate professor

Myoungwhon Jung, Ph.D., Indiana University, associate professor

William Penrod, Ed.D., University of Louisville, associate professor

La Vonne I. Neal, Ph.D., University of Texas, Austin, professor

Toni VanLaarhoven, Ed.D., Northern Illinois University, associate professor

College of Engineering and Engineering Technology

Promod Vohra, Ed.D., P.E., dean
Mansour Tahernezahdi, Ph.D., P.E., associate dean, research and graduate programs
Omar Ghrayeb, Ph.D., associate dean, outreach and undergraduate programs

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.

Contract Major

Requirements for 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 learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

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 learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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.

Certificate of Undergraduate Study

Nanotechnology (9)

The undergraduate certificate in nanotechnology prepares undergraduate students in sciences, technology, engineering, and mathematics (STEM) areas in authentic team-based, interdisciplinary experiences in nanotechnology. Nanotechnology, by virtue of its convergent nature, provides ideal interdisciplinary learning experiences students need if they are to be successful 21st-century STEM practitioners.

Requirements

UEET 101 - Introduction to Engineering (1)

UEET 102 - Engineering Connection Seminar I (1)

UEET 103 - Engineering Connection Seminar II (1)

UEET 235 - Fundamentals and Applications of Nanotechnology I (3)

UEET 245 - Fundamentals and Applications of Nanotechnology II (3)

Degree with Honors

The College of Engineering and Engineering Technology (CEET) Honors Program is designed to provide exceptional students an opportunity to conduct in-depth exploration and research of topics in engineering and technology. This program is intended to support the general mission of the University Honors Program with the specific goal of providing students more interaction with faculty, opportunities for undergraduate research, and exposure to research activity expected of graduate programs.

Students who wish to work toward a B.S. degree with honors in engineering or engineering technology should discuss the matter with the departmental undergraduate adviser and a representative from the university honors program. Lower division honors for freshmen and sophomores is managed by the University Honors Program and can be achieved through the registration for honors courses that are part of general education or major requirements. Engineering and engineering technology majors with at least a 3.20 overall GPA and a minimum 3.40 GPA in the courses required in the chosen major are eligible for the CEET Honors Program. Admission to the college's upper division honors program will be considered only for majors in their junior and senior years and requires the approval of the departmental undergraduate adviser, the college honors director, and a representative of the university honors program. 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.

Requirements for earning the baccalaureate degree "With Engineering Honors" include a minimum of 12 semester hours of honors courses numbered 300 or above that are within the chosen major program. The senior capstone design course specific to their discipline (i.e., ELE 492, MEE 482, etc.) must count toward the required hours of honors work and include an individual independent research activity separate from the final design report. The topic and scope of the independent research activity must be approved by the faculty project adviser and the college honors director. A final report of the activity is filed with both the college and the university honors program.

Note: Most engineering honors courses are not separate courses but rather subsections of regular courses with an enriching experience. The honors student may contract an honors designation of those courses without explicit honors mini-sections.

Dean's List Criteria

The College of Engineering and Engineering Technology recognizes undergraduates whose academic performance has been outstanding by placing them on the Dean's List. The Dean's List consists of students who achieve a GPA of 3.50 or higher (on a 4.00 scale) while completing a minimum of 12 graded semester hours within a fall or spring semester.

Interdisciplinary Courses Offered by the College of Engineering and Engineering Technology (IEET, UEET)

IEET 490. TOPICS IN ENGINEERING AND ENGINEERING TECHNOLOGY (1-3). 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.

IEET 491. INTEGRATED SYSTEMS ENGINEERING I (3). Introduction to the fundamental principles of integrated systems engineering and their application to the development of integrated systems. Topics include integrated systems engineering principles, integrated systems engineering processes and methodologies, integration of the necessary technical disciplines and integrated systems engineering project management. Students may not enroll in IEET 591 for credit towards the degree unless they are enrolled in the B.S.-M.S. program. PRQ: Consent of college.

IEET 492. INTEGRATED SYSTEMS ENGINEERING II (3). Advanced integrated systems engineering and related applications, with focus on integrated systems engineering of complex systems, products and services; application of principles in integrated systems engineering processes and methodologies; incorporating concepts such as integrated systems reliability management, maintenance, safety, security and cost optimization. Students may not enroll in IEET 592 for credit towards the degree unless they are enrolled in the BS-MS program. PRQ: IEET 491 or consent of college.

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.

UEET 235. FUNDAMENTALS AND APPLICATIONS OF NANOTECHNOLOGY I (3). Theory and laboratory experiments to demonstrate fundamentals and applications of nanotechnology in engineering and sciences. Topics covered are nanosensors, nanoparticles, nano-self-assembly, and marketing aspects of nanotechnology-based products. PRQ: UEET103.

UEET 245. FUNDAMENTALS AND APPLICATIONS OF NANOTECHNOLOGY II (3). Continuation of UEET 235. Theory and laboratory experiments on sensor and device aspects of nanotechnology. Topics covered are nanosensors, nanoporous material, nano self-assembly, and marketing aspects of nanotechnology-based products. PRQ: UEET 235.

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 individuals or as members of teams, our graduates will have:

A solid background in mathematics, science, and engineering fundamentals that make it possible to acquire and use contemporary knowledge and tools to practice electrical engineering, in a professional and ethical way, as well as to succeed in graduate education.

The ability to develop problem-solving skills to design and build systems and to communicate, orally and in writing, with others from inside and outside the profession.

Program Learning Outcomes

The electrical engineering program is designed to provide our graduates with the:

- A. Ability to apply their knowledge of mathematics, science, and engineering.
- B. Ability to design and conduct experiments, as well as to analyze and interpret data.
- C. Ability to design a system, component, or process to meet desired needs.
- D. Ability to function on multidisciplinary teams.
- E. Ability to identify, formulate, and solve engineering problems.
- F. Understanding of professional and ethical responsibility.
- G. Ability to communicate effectively.
- H. Broad education necessary to understand the impact of engineering solutions in a global and societal context.
- I. Recognition of the need for, and an ability to engage in lifelong learning.
- J. Knowledge of contemporary issues.
- K. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Department Requirements

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.)

Emphasis 1. Electrical and Computer Engineering

Requirements in Department (41)

- ELE 210 - Engineering Circuit Analysis (3)
- ELE 210U - Engineering Circuit Laboratory Project (1)
- ELE 250 - Computer Engineering I (3)
- ELE 250U - Computer Engineering I Laboratory (1)
- 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)
- ELE 491 - Electrical Engineering Design Proposal (1)
- ELE 492 - Electrical Engineering Design Project (3),
OR ELE 429 - Biomedical Engineering Design Project (3)

Requirements outside Department (45-47)

- *CHEM 210 - 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 209 - Engineering Mechanics: Statics and Dynamics (4),
OR MEE 210 - Engineering Mechanics: Statics (3), and
MEE 211 - Engineering Dynamics: Dynamics (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)
- ISYE 335 - Probability and Statistics for Engineers (3),
OR STAT 350 - Introduction to Probability and Statistics (3)
- UEET 101 - Introduction to Engineering (1)

Electives (18)

Electives may be any ELE course numbered 400 or higher with the exception of ELE 429, 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 five areas.

- Microelectronics: ELE 420, 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
- Signal Processing/Communications: ELE 425, ELE 451, ELE 452, ELE 454, ELE 461, ELE 463, ELE 464
- Electromagnetics: ELE 470, ELE 471, ELE 474, ELE 475, ELE 477
- Computer Engineering: ELE 452, ELE 455, ELE 457, or a computer science courses approved by the student's adviser

Total Hours for a Major in Electrical Engineering: 106

Emphasis 2. Biomedical Engineering

Requirements in Department (40)

ELE 210 - Engineering Circuit Analysis (3)
 ELE 210U - Engineering Circuit Laboratory Project (1)
 ELE 250 - Computer Engineering I (3)
 ELE 250U - Computer Engineering I Laboratory (1)
 ELE 315 - Signals and Systems (3)
 ELE 330 - Electronic Circuits (4)
 ELE 335 - Theory of Semiconductor Devices I (3)
 ELE 356 - Computer Engineering II (4)
 ELE 370 - Engineering Electromagnetics (3)
 ELE 380 - Control Systems I (4)
 ELE 420 - Medical Instrumentation (4)
 ELE 425 - Biomedical Signal Processing (3)
 ELE 429 - Biomedical Engineering Design Project (3)
 ELE 491 - Electrical Engineering Design Proposal (1)

One of the following two tracks. Track 1 is for students who intend to pursue a career as biomedical engineers. Track 2 is for students who intend to pursue careers such as medicine, dentistry, pharmacy, optometry, or podiatry. Students need to consult with the advisor of pre-professional programs to ensure meeting all requirements.

Track 1

Requirements outside Department (63-65)

BIOS 208 - Fundamentals of Biology I (3)
 BIOS 210 - Fundamentals of Biology I Laboratory (1)
 BIOS 311 - Functional Human Anatomy (4),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 210 - General Chemistry I (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 CHEM 230 - Introductory Organic Chemistry (3)
 CHEM 231 - Introductory Organic Chemistry Laboratory (1)
 CHEM 370 - Introductory Biochemistry (3)
 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 209 - Engineering Mechanics: Statics and Dynamics (4)
 MEE 340 - Fluid Mechanics (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)
 ISYE 335 - Probability and Statistics for Engineers (3),
 OR STAT 350 - Introduction to Probability and Statistics (3)
 UEET 101 - Introduction to Engineering (1)

Electives (6-8)

Choose 6-8 credit hours from the following:

BIOS 213 - Introductory Bacteriology (3)
 BIOS 359 - Human Neurobiology (4)
 ELE 421 - Biomedical Sensor Engineering (3)
 ELE 499 - Honors Undergraduate Research (3)
 ISYE 410 - Human Factors Engineering (3)
 KNPE 313 - Mechanical Kinesiology of Motor Skills (3)
 KNPE 314 - Applied Kinesiology (4)
 PHYS 335 - Biophysics (3)
 PHYS 434 - Nuclear Energy and Radiation (3)

Track 2

Requirements outside Department (62)

BIOS 208 - Fundamentals of Biology I (3)
 BIOS 209 - Fundamentals of Biology II (3)
 BIOS 210 - Fundamentals of Biology Laboratory I (1)
 BIOS 211 - Fundamentals of Biology Laboratory II (1)
 BIOS 355 - Human Physiology (4)
 *CHEM 210 - General Chemistry I (3)

*CHEM 211 - General Chemistry II (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 213 - General Chemistry Laboratory II (1)
 CHEM 330 - General Organic Chemistry I (3)
 CHEM 331 - General Organic Chemistry II (3)
 CHEM 332 - General Organic Laboratory (1)
 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)
 PHYS 283 - Fundamentals of Physics III: Quantum Physics (3)
 ISYE 335 - Probability and Statistics for Engineers (3),
 OR STAT 350 - Introduction to Probability and Statistics (3)
 UEET 101 - Introduction to Engineering (1)

Electives (6)

Choose 3 semester hours from ELE courses numbered 400 or higher with the exception of ELE 420, ELE 421, ELE 425, ELE 429, ELE 491, ELE 492, ELE 497, and ELE 499.

Choose 3 semester hours from the following:

ELE 421 - Biomedical Sensor Engineering (3)
 ELE 499 - Honors Undergraduate Research (3)
 ISYE 410 - Human Factors Engineering (3)
 KNPE 313 - Mechanical Kinesiology of Motor Skills (3)
 KNPE 314 - Applied Kinesiology (4)
 PHYS 335 - Biophysics (3)

Total Hours for Emphasis 2, Biomedical Engineering: 108-113

Minor in Biomedical Engineering (26-27)

ELE 210 - Engineering Circuit Analysis (3)
 ELE 210U - Engineering Circuit Laboratory Project (1)
 ELE 250 - Computer Engineering I (3)
 ELE 250U - Computer Engineering I Laboratory (1)
 ELE 315 - Signals and Systems (3)
 ELE 330 - Electronic Circuits (4)
 ELE 420 - Medical Instrumentations (4)
 ELE 425 - Biomedical Signal Processing (3)
 BIOS 311 - Functional Human Anatomy (4),
 OR BIOS 357 - Human Anatomy and Physiology (5)

Minor in Electrical Engineering (21-23)

ELE 210 - Engineering Circuit Analysis (3)
 ELE 210U - Engineering Circuit Laboratory Project (1)
 ELE 250 - Computer Engineering I (3)
 ELE 250U - Computer Engineering I Laboratory (1)
 ELE 315 - Signals and Systems (3)
 ELE 330 - Electronic Circuits (4)

Two courses from the following:

ELE 335 - Theory of Semiconductor Devices I (3)
 ELE 340 - Electrical Power Systems (4)
 ELE 356 - Computer Engineering II (4)
 ELE 360 - Communication Systems (4)
 ELE 370 - Engineering Electromagnetics (3)
 ELE 380 - Control Systems I (4),
 OR MEE 322 - Dynamic Systems and Control I (3)

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 frequency domain; and steady state analysis. Three lectures and one recitation per week. PRQ: MATH 230 and PHYS 273, both 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. CRQ: ELE 210.

250. COMPUTER ENGINEERING I (3). 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. PRQ: ELE 210 with a grade of C or better.

250U. COMPUTER ENGINEERING I LABORATORY (1). Laboratory experiments related to the design and implementation of digital systems. Combinational and sequential circuits are investigated. PRQ: ELE 210U. CRQ: ELE 250.

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 210 and ELE 210U and MATH 336 all with a grade of C or better.

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 210 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 and ELE 210U both 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: CSCI 240 or other high-level programming language, and ELE 250 and ELE 250U.

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 ISYE 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.

420. BIOMEDICAL INSTRUMENTATION (4). Design and application of electrodes, bio-potential amplifiers, biosensor applications, therapeutic devices. Medical imaging. Electrical safety. Measurement of ventilation, blood pressure and flow. Three hours lecture per week and 10 laboratory sessions (3 hours each). PRQ: ELE 330.

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: ELE 330 or ELE 335 or MEE 390.

425. BIOMEDICAL SIGNAL PROCESSING (3). Modeling of biomedical signals and analysis of biomedical systems using both time-domain and frequency-domain techniques. Design of linear and nonlinear filters for biomedical applications and medical imaging. Practical applications in cardiac and neurological signal processing. Not available for credit to students with credit in ELE 451. PRQ: ELE 315.

429. BIOMEDICAL ENGINEERING DESIGN PROJECT (3). Students create a solution to the proposed biomedical engineering design problem. The solution incorporates knowledge of biological sciences, engineering and design concepts. Analytical and computational tools address the complete solution which includes safety and cost effectiveness. Team project required. PRQ: Completion of all ELE 300-level courses required by the major, and ELE 491, and either ELE 420 or ELE 425.

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.

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.

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.

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 CMOS circuits. Introduction to physical layout of VLSI circuits and SPICE modeling of MOS transistors for analog circuits. Introduction to design methodologies and advances in analog designs. Design of different MOS circuits such as current mirrors, voltage references, amplifiers, operational amplifiers, and OTAs. PRQ: ELE 330.

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: Senior standing.

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: Senior Standing.

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 harmonics and ripple. PRQ: ELE 315 and 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 315 and 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.

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 315 and ELE 356.

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 and CSCI 240.

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, nonparametric 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; and ELE 250; and STAT 350 or ISYE 335.

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 315 and ELE 330.

463. RADIO FREQUENCY ELECTRONICS (3). Design and implementation of electronic subsystems directed towards application in the frequency bands spanning 100 kHz through UHF. Spectral region supports analog signal processing critical to wireless communication. PRQ: ELE 330 and 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. Multimode 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 and ELE 360 and ELE 370.

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 (3). 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 380.

491. ELECTRICAL ENGINEERING DESIGN PROPOSAL (1). Discussion of global impacts of engineering designs including social, environmental, and ethical concerns as well as modern topics in electrical engineering. Development of a proposal for a senior design project that addresses these concepts. Educational programs and career opportunities for electrical engineers are addressed. For electrical engineering students only. Team project required. PRQ: Consent of department.

492. ELECTRICAL ENGINEERING DESIGN PROJECT (3). Students create a solution to the proposed engineering design problem. The solution is to incorporate engineering design concepts, including safety and cost effectiveness, as well as employ analytical and computer tools. Team project required. PRQ: ELE 491 and completion of all ELE 300-level courses required by the major.

497. INDEPENDENT STUDY (1-3). 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 (1-3). 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

499. HONORS UNDERGRADUATE RESEARCH (1-3). 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

Ibrahim Abdel-Motaleb, Ph.D., P.E., University of British Columbia, professor, chair

Sen-Maw Kuo, Ph.D., University of New Mexico, professor

Veysel Demir, Ph.D., Syracuse University, assistant professor

Michael Haji-Sheikh, Ph.D., University of Texas, Arlington, associate professor

Reza Hashemian, Ph.D., P.E., University of Wisconsin, professor

Lichuan Liu, Ph.D. New Jersey Institute of Technology, assistant professor

Vincent McGinn, Ph.D., P.E., Pennsylvania State University, professor

Mansour Tahernezehadi, 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 multidisciplinary 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 multidisciplinary 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

All industrial and systems 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 Industrial and Systems Engineering (B.S.)

Requirements in Department (45)

ISYE 220 - Engineering Economy (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 310 - Work Measurement and Work Design (3)
 ISYE 335 - Probability and Statistics for Engineers (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 430 - Quality Control (3)
 ISYE 435 - Experimental Design for Engineering (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 (48-52)

*CHEM 210 - General Chemistry I (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 CSCI 240 - Computer Programming in C++ (4)
 ELE 210 - Engineering Circuit Analysis (3),
 OR TECH 175 - Electronic Fundamentals (3) and TECH 175A -
 Electronic Fundamentals Laboratory (1)
 *MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 MATH 232 - Calculus III (4)
 MATH 336 - Ordinary Differential Equations (3)
 MEE 209 - Engineering Mechanics: Statics and Dynamics (4),
 OR MEE 210 - Engineering Mechanics I (3) and 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)
 One course in basic economics chosen from the following:
 ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)

Electives (15)¹

At least 9 semester hours must be from non-required ISYE courses at 300 or 400 level. The remaining 6 semester hours may be chosen from:

Non-required ISYE 300- or 400- level courses
 300- or 400- level courses from ELE or MEE with the exception
 of MEE 330 and MEE 331

* 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.

The following list:

ACCY 206 - Introductory Financial Accounting (3)
 ACCY 207 - Introductory Cost Management (3)
 ACCY 288 - Fundamentals of Accounting (3)
 BIOS 311 - Functional Human Anatomy (4)
 COMS 302 - Introduction to Organizational Communication Theory (3)
 COMS 361 - Business and Professional Communication (3)
 ECON 301 - Labor Problems (3)
 ECON 361 - Intermediate Macroeconomics (3)
 ECON 386 - Environmental Economics (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)
 OMIS 442 - Quality Management (3)
 PSYC 345 - Cognitive Psychology (3)
 PSYC 372 - Social 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 and systems 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 1. Health Systems Engineering

Requirements in Department (45)

ISYE 220 - Engineering Economy (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 310 - Work Measurement and Work Design (3)
 ISYE 335 - Probability and Statistics for Engineers (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 430 - Quality Control (3)
 ISYE 435 - Experimental Design for Engineering (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 494 - Health Systems Design Project (4)

Requirements outside Department (51-54)

*CHEM 210 - General Chemistry I (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 CSCI 240 - Computer Programming in C++ (4)
 ELE 210 - Engineering Circuit Analysis (3),
 OR TECH 175 - Electronic Fundamentals (3) AND TECH 175A -
 Electronic Fundamentals Laboratory (1)
 *MATH 229 - Calculus I (4)
 MATH 230 - Calculus II (4)
 MATH 232 - Calculus III (4)
 MATH 336 - Ordinary Differential Equations (3)
 MEE 209 - Engineering Mechanics: Statics and Dynamics (4),
 OR MEE 210 - Engineering Mechanics I (3) and MEE 211 -
 Engineering Mechanics II (3)
 MEE 270 - Engineering Graphics (3)
 PHHE 295 - Introduction to Public Health (3) (this course counts as
 interdisciplinary course as well)
 *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)

One course in basic economics chosen from the following:

ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)

Technical Courses (15)

Select four courses

PHHE 435 - Ethical Decision Making for Health Professionals (3),
 PHHE 441 - Supervision in Health Care Facilities (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)
 PHHE 461 - Principles of the Organization of Public Health and Health Care Programs (3)
 PHHE 467 - Public Health Research and Evaluation (3)
 PHHE 469 - Principles of Health Planning (3)

Select one course

ISYE 472 - Queueing Methods for Services and Manufacturing (3)
 ISYE 475 - Decision Analysis for Engineering (3)
 ISYE 482 - Engineering Information Systems (3)
 OMIS 351 - Information Systems in Organizations (3)

Total Hours for an Emphasis in Health Systems Engineering: 111

Emphasis 2. Manufacturing Systems

Requirements in Department (45)

ISYE 220 - Engineering Economy (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 310 - Work Measurement and Work Design (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 430 - Quality Control (3)
 ISYE 435 - Experimental Design for Engineering (3)
 ISYE 440 - Production Planning and Control (3)
 ISYE 450 - Lean Manufacturing Systems (3)
 ISYE 460 - Facilities Planning and Design (3)
 ISYE 480 - Simulation Modeling and Analysis (3)
 ISYE 496 - Manufacturing Systems Design Project (4)

Requirements outside Department (48-52)

Same as required for major.

Technical Courses (15)

ISYE 439 - Six Sigma Performance Excellence and Modern Problem Solving (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 TECH 365 - Metrology (3)
 ISYE 431 - Reliability Engineering (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

Emphasis 3. Engineering Management

Requirements in Department (45)

ISYE 220 - Engineering Economy (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 310 - Work Measurement and Work Design (3)
 ISYE 335 - Probability and Statistics for Engineers (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 430 - Quality Control (3)
 ISYE 435 - Experimental Design for Engineering (3)
 ISYE 440 - Production Planning and Control (3)
 ISYE 450 - Lean Manufacturing Systems (3)
 ISYE 460 - Facilities Planning and Design (3)
 ISYE 480 - Simulation Modeling and Analysis (3)
 ISYE 493 - Engineering Management Design Project (4)

Requirements outside Department (48-52)

*CHEM 210 - General Chemistry I (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 CSCI 240 - Computer Programming in C++ (4)
 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 209 - Engineering Mechanics: Statics and Dynamics (4),
 OR MEE 210 - Engineering Mechanics I (3) and 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)
 One course in basic economics chosen from the following:
 ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)

Technical Courses (15)

Select three courses (9)
 ISYE 442 - Engineering Project Management (3)
 ISYE 475 - Decision Analysis for Engineering (3)
 ISYE 490 - Systems Engineering Management (3),
 OR TECH 485 - Risk Management (3)
 MGMT 333 - Principles of Management (3),
 OR ECON 301 - Labor Problems (3),
 OR PSYC 372 - Social Psychology (3),
 OR TECH 404 - Supervision in Industry (3)
 Select one course (3)
 ACCY 207 - Introductory Cost Management (3)
 ACCY 288 - Fundamentals of Accounting (3)
 ECON 360 - Intermediate Microeconomics (3)
 Select one course (3)
 COMS 302 - Introduction to Organizational Communication (3)
 COMS 361 - Business and Professional Communication (3)
 MGMT 346 - Business Communication (3)

Total Hours for an Emphasis in Management 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. To enter the integrated sequence, a student must obtain early admission to the NIU Graduate School, and formulate a detailed plan of study, working closely with a faculty adviser.

Students in this sequence must satisfy all the requirements of the undergraduate industrial and systems engineering curriculum with the exception that 9 semester hours of graduate credit may be included during the student's final undergraduate semester. These hours must be approved by the department.

Minor in Sustainable Engineering (20-21)

Sustainable engineering is concerned with the integration of social, environmental, and economic considerations into product, process, and energy systems design methods. The objective is to minimize the total of the negative environmental impacts across the entire life cycle and maximize the positive social and

economic impacts. Also, sustainable engineering encourages the consideration of the complete product and process life cycle during the design cycle. This minor will equip graduating engineers and scientists with the tools they need to meet the challenges associated with delivering goods, energy, and services through sustainable means.

Core Courses (9)

ISYE 420 - Introduction to Energy Management Systems (3)
 ISYE 421 - Introduction to Green Engineering (3)
 ISYE 453 - Integrated Product and Process Design (3)

Technical Elective Courses (5 - 6)

Select two courses
 ISYE 100 - Fundamental of Manufacturing Systems (3)
 ISYE 250 - Introduction to Lean Systems Engineering (2)
 ISYE 439 - Six Sigma Performance Excellence and Modern
 Problem Solving (3)
 ISYE 490 - Systems Engineering Management (3)
 MEE 101 - Energy and the Environment (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)
 TECH 484 - Energy Management (3)

Interdisciplinary Elective Courses (6)

Select two courses
 ENVS 301 - Environmental Science I: Physical Systems (3)
 ENVS 302 - Environmental Science II: Biological Systems (3)
 ENVS 303 - Environment in the Social Sciences and
 Humanities (3)
 ENVS 304 - Environmental Law, Policy, and Economics (3)
 POLS 324 - Environmental Law and Policy (3)

Certificate of Undergraduate Study

Lean Six Sigma (12)

This certificate introduces undergraduate students to those skills required in manufacturing and service plants that apply the principles of lean production and six sigma. Industry, in general, expects graduates of industrial and systems engineering to have a strong background in lean production and six sigma concepts.

Requirements

ISYE 430 - Quality Control (3)
 ISYE 435 - Experimental Design for Engineering (3)
 ISYE 439 - Six Sigma Performance Excellence and Modern
 Problem Solving (3)
 ISYE 450 - Lean Manufacturing Systems

Logistics (12)

This certificate equips undergraduate students with skills required to effectively manage a supply chain and its constituents. Effective management of supply chain and its constituents is important to effectively and efficiently compete in a global economy.

Take four out of the following six courses (12)

ISYE 440 - Production Planning and Control (3)
 ISYE 450 - Lean Manufacturing Systems (3)
 ISYE 460 - Facilities Planning and Design (3)
 ISYE 461 - Warehousing and Distribution Systems (3)
 ISYE 466 - Analysis and Design of Supply Chain Systems (3)
 ISYE 474 - Scheduling and Logistics (3)

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.

250. INTRODUCTION TO LEAN SYSTEMS ENGINEERING (2). Introduction to various lean concepts and lean tools at the basic level. Topics include lean principles, kaizen, wastes identification, flow charting, capacity analysis, productivity analysis, value stream mapping, workplace organization and standardization, visual control/management, plant layout, and line balance. PRQ: MATH 110 or consent of department.

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.

335. PROBABILITY AND STATISTICS FOR ENGINEERS (3). Sampling and descriptive statistics; random variables; discrete and continuous probability distributions and its applications to engineering problems; fitting data to distributions; confidence intervals; hypothesis testing using both nonparametric and parametric methods; and simple regression. Emphasis is given to engineering applications. 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 queueing systems. PRQ: ISYE 335.

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.

420. INTRODUCTION TO ENERGY MANAGEMENT SYSTEMS (3). Introduction to analytic and strategic issues related to energy systems management through systems thinking and modeling, including energy management in commercial building and industrial plants. Exposure to practical analytical skills of energy economics and planning approaches that take into account the cost of environment impacts. Interrelationship between energy, economics and the environment, as well as other important issues in energy policy. PRQ: Consent of the department.

421. INTRODUCTION TO GREEN ENGINEERING (3). *Crosslisted as ENVS 421X*. Basic principles of green engineering, impact of engineering activities on the global environment and ways to minimize the impact through better selection of materials, design of products and processes, distribution and reuse of products, and management of life cycles, etc. Life cycle analysis concepts and their applications to product and process life cycles. Environmental ethics and environmental auditing, including ISO environmental standards. PRQ: Consent of the department

430. 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 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 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 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 335.

439. SIX SIGMA PERFORMANCE EXCELLENCE AND MODERN PROBLEM SOLVING (3). The Six Sigma formula for success is a mixture of hard skills, soft skills, tools, mentoring, DMAIC, and the Black Belt organization. Introduction to these areas and foundation on how to implement them. Focus on robust foundational problem solving techniques that enhance the functional role of individuals to quickly solve complex problems. Cost, quality, and throughput improvement will be addressed. PRQ: ISYE 335 or STAT 350, or UBUS 223.

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 either STAT 208 or STAT 350 or ISYE 335; or consent of department.

450. LEAN MANUFACTURING SYSTEMS (3). Introduction to modern issues in lean manufacturing systems and practice of lean tools. Topics include overview of lean manufacturing systems, value stream analysis, quick changeover, point of use storage, quality at source, teams, total productive maintenance, pull/just-in-time/kanban, and cellular manufacturing. PRQ: ISYE 250 or consent of department.

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). Introduction to modern issues and practice of integrating various aspects in product design and process development. Topics include concurrent engineering, product design and development strategies, product life cycle design, integrated information support for product design and development, computer-aided process planning, design for manufacturing, and cost analysis of product design and development. 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 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. CRQ: ISYE 350 and ISYE 370.

461. WAREHOUSING AND DISTRIBUTION SYSTEMS (3). Introduction to warehousing and distribution center operations and their roles in supply chains, modern material handling equipment, and algorithms involved in the design and operation of warehouses and distribution centers. PRQ: ISYE 370 or consent of the department.

466. ANALYSIS AND DESIGN OF SUPPLY CHAIN SYSTEMS (3). Analysis of material and information flows in complex production-distribution networks. Knowledge and the tools necessary to develop, implement, and sustain strategies for designing supply chains. Focus on the use of analytical modeling techniques to understand and manage supply chains. Topics include planning demand and supply, inventory management, transportation, network design and facilities decisions, and coordination in a supply chain. PRQ: ISYE 440 or consent of department.

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.

474. SCHEDULING AND LOGISTICS (3). Special topics on applied operations research with focus on theory of scheduling and logistics. Major topics include: single and multiple-stage scheduling problems, vehicle routing and scheduling problems, bin packing problems, concepts of supply chain, heuristics, modern tools to solve this type of problems, and solution implementation issues. PRQ: ISYE 440 and CSCI 240, or consent of department.

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 335 or STAT 350 or UBUS 223.

477. HEURISTIC OPTIMIZATION (3). Introduction to heuristic methods to solve integer or combinatorial problems, characteristics and limitation of each method, theory and applications. PRQ: ISYE 370 or consent of the department.

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: ISYE 335, or STAT 350, or UBUS 223, 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.

490. SYSTEMS ENGINEERING MANAGEMENT (3). Introduction to the fundamental principles of systems engineering and their applications to the development and management of complex systems. Address modern systems engineering and management principles through systems definition, requirements analysis, and design and implementation of systems. Examine the processes of systems engineering from the perspective of system life cycle. Presentation of modeling tools and their use with respect to system optimization and architecture evaluation. PRQ: MATH 230 and STAT 208 or equivalent, or consent of department.

493. ENGINEERING MANAGEMENT DESIGN PROJECT (3). Basic approaches to designing and managing complex engineering systems. Focus on synthesis and application of engineering management concepts and 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 industry, business, service, government, not-for-profit organizations, or on emerging research issues. PRQ: At least four of the technical courses required for the engineering management emphasis.

494. HEALTH SYSTEMS DESIGN PROJECT (4). Basic approaches to designing health systems. Focus on application of industrial and systems 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 health sector, service or governmental organizations, or on emerging research issues. PRQ: ISYE 430, ISYE 440, ISYE 450, ISYE 480, and at least three of the technical courses required for the health systems engineering emphasis, or consent of department.

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: ISYE 310, ISYE 430, 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 430, ISYE 440, ISYE 460, ISYE 480.

497. INDEPENDENT STUDY (1-3). 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 (1-3). 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

Purushothaman Damodaran, Ph.D., Texas A&M University, associate professor, chair

Buyung Agusdinata, Ph.D., Delft University of Technology, assistant professor

Ehsan Asoudegi, Ph.D., West Virginia University, assistant professor

Shi-Jie Chen, Ph.D., University of New York-Buffalo, associate professor

Omar Ghrayeb, Ph.D., New Mexico State University, associate professor

Jeong Ho Kim, Ph.D., University of Washington at Seattle, assistant professor

Murali Krishnamurthi, Ph.D., Texas A&M University, Presidential Teaching Professor

Reinaldo Moraga, Ph.D., University of Central Florida, associate 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. The Cooperative Education/Internship Program is also available to qualified students.

The department also offers an integrated B.S./M.S. Sequence that leads to a M.S. in Mechanical Engineering after students received a B.S. in Mechanical Engineering. With approval, up to three technical electives taken in the last semester of the B.S. can be counted toward the M.S. program. Students who are interested in the B.S./M.S. sequence should refer to the Graduate Catalog for details.

Mission

The mission of the Mechanical Engineering Department is to provide a high-quality, visionary engineering education that reflects professional engineering standards and prepares students to become engineers and leaders capable of solving technical challenges that industry and society face now and in the future; to conduct quality research by developing and/or applying engineering knowledge and tools to address society's technical needs and challenges; and to provide quality professional and public services to our communities.

Educational Objectives

The undergraduate mechanical engineering program is designed to prepare students for successful careers in engineering by providing them with the following: a balanced education in mechanical engineering fields; a foundational knowledge in mathematics and physical sciences; a broad general education in the humanities/arts, social sciences and interdisciplinary studies; training for effective communication and team work; and an understanding and commitment of an engineer's professional and ethical responsibilities. Our educational objectives are based on the needs of the program's constituencies: employers, alumni, students and faculty. We expect our graduates to attain the following educational objectives within a few years of graduation: 1. to become successful professionals; 2. to successfully apply engineering knowledge and tools to solve technical problems and challenges, and to design and/or manufacture valuable products

or processes; 3. to make contributions to their professional fields, exhibit effective communication skills, and become valuable team members; and 4. to continue professional development and assume professional and leadership responsibility.

Program Outcomes

The graduates of undergraduate mechanical engineering program should attain the following outcomes by the time of graduation: an ability to apply knowledge of mathematics, science, and engineering; an ability to design and conduct experiments, as well as to analyze and interpret data; an ability to design a system, component, or process to meet desired needs within realistic constraints such as scheduling, economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability; an ability to function on multi-disciplinary teams; an ability to identify, formulate, and solve engineering problems; an understanding of professional and ethical responsibility; an ability to communicate effectively and professionally; the broad education necessary to understand the impact of engineering solutions in a global and societal context; recognition of the need for, and an ability to engage in life-long learning; knowledge of contemporary issues; and an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Department Requirements

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.

Major GPA will be calculated using all MEE courses and up to one course taken outside the department which satisfies the group B technical elective requirement. The GPA calculation will only include courses taken at NIU.

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 (65-66)

MEE 210 - Engineering Mechanics I (3)
 MEE 211 - Engineering Mechanics II (3)
 MEE 212 - Mechanics of Materials (3)
 MEE 270 - Engineering Graphics (3)
 MEE 320 - Mechanism Design and Analysis (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 (3)
 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
 MEE 351 - Applied Thermodynamics (3)
 MEE 410 - Intermediate Mechanics of Materials (3)
 MEE 421 - Dynamic Systems and Control II (3)
 MEE 422 - Design of Robot Manipulators (3)
 MEE 423 - Mechanical Reliability (3)
 MEE 424 - Machinery Vibration (3)
 MEE 425 - Design of Mobile Robots (3)
 MEE 426 - Mechatronics System Design (3)
 MEE 431 - Composite Materials (3)
 MEE 432 - Laser Materials Processing (3)
 MEE 433 - Advanced Manufacturing Processes (3)
 MEE 451 - Refrigeration and Air Conditioning (3)
 MEE 453 - Propulsion (3)
 MEE 454 - Alternative and Renewable Energy (3)
 MEE 455 - Energy Conservation and Environmental
 Sustainability (3)
 MEE 480 - Finite Element Methods (3)
 MEE 484 - Advanced Computing in Mechanical Engineering (3)
 MEE 490 - Experimental Methods in Mechanical Engineering II (3)
Group-B: Other electives
 ISYE 430 - Quality Control (3)
 ISYE 431 - Reliability Engineering (3)
 ISYE 439 - Six Sigma Performance Excellence and
 Modern Problem Solving (3)
 ISYE 450 - Integrated Manufacturing Systems (3)
 ISYE 451 - Expert Systems in Engineering (3)

Requirements outside Departments (42)

*CHEM 210 - General Chemistry I (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 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)
 ISYE 335 - Probability and Statistics for Engineers (3),
 OR STAT 350 - Introduction to Probability and Statistics (3)
 *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)
 UEET 101 - Introduction to Engineering (1)

Total Hours for a Major in Mechanical Engineering: 107-108

Emphasis 1. Advanced Computing and Simulation

Requirements in Department (65-66)

Same as required for major, in addition:
 MEE 482C - Senior Mechanical Engineering Design Project:
 Emphasis in Computing and Simulation (3)

At least two of the following three courses:

MEE 381 - Computational Methods and Programming in
 Engineering Design (3)
 MEE 480 - Finite Element Methods (3)
 MEE 484 - Advanced Computing in Mechanical Engineering (3)

Requirements outside Department (42)

Same as required for major.

**Total Hours for an Emphasis in Advanced Computing and
 Simulation: 107-108**

Emphasis 2. Mechatronics and Robotics

Requirements in Department (65-66)

Same as required for major, in addition:
 MEE 482M - Senior Mechanical Engineering Design Project with
 Emphasis in Mechatronics (3)

At least two of the following four courses:

MEE 421 - Dynamic Systems and Control II (3)
 MEE 422 - Design of Robot Manipulators (3)
 MEE 425 - Design of Mobile Robots (3)
 MEE 426 - Mechatronics Systems Design (3)

Requirements outside Department (42)

Same as required for major.

Total Hours for an Emphasis in Mechatronics: 107-108

Emphasis 3. Sustainable Energy

Requirements in Department (65-66)

Same as required for major, in addition:
 MEE 482E - Senior Mechanical Engineering Design Project:
 Emphasis in Sustainable Energy (3)

At least two of the following four courses:

MEE 451 - Refrigeration and Air Conditioning (3)
 MEE 453 - Propulsion (3)
 MEE 454 - Alternative and Renewable Energy (3)
 MEE 455 - Energy Conservation and Environmental
 Sustainability (3)

Requirements outside Department (42)

Same as required for major.

Total Hours for an Emphasis in Sustainable Energy: 107-108

Minor in Mechanical Engineering (21)

MEE 210 - Engineering Mechanics I (3)
 MEE 211 - Engineering Mechanics II (3)
 MEE 212 - Strength of Materials (3)
 MEE 270 - Engineering Graphics (3)
 MEE 320 - Mechanism Design and Analysis (3)
 MEE 350 - Engineering Thermodynamics (3)
 MEE 430 - Computer-Aided Design and Manufacturing (3)

Course List

101. 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.

209. ENGINEERING MECHANICS: STATICS AND DYNAMICS (4). Engineering mechanics, covering both statics and dynamics. Topics include vector algebra, force systems, free-body diagrams, equilibrium of particles and rigid bodies, kinematics of particles and rigid bodies, Newton's laws applied to particles and rigid bodies, friction. Mechanical engineering students should take MEE 210 and MEE 211 instead of this course. PRQ: MATH 230 and PHYS 253.

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: MATH 230 with grade of C or better and MEE 210.

212. MECHANICS OF MATERIALS (3). Mechanics of deformable bodies with emphasis on stresses and strains; shear and bending moments; torsion, buckling; failure criteria and design concepts. PRQ: MEE 210.

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 210, CHEM 212, MATH 229, and PHYS 253.

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.

320. MECHANISM DESIGN AND ANALYSIS (3). Kinematic and dynamic analysis of mechanisms; mechanism design philosophy; and mechanism synthesis. Theory and design are supplemented by computer techniques. Mechanisms include cams, gears, and linkages. PRQ: MEE 211.

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. In addition to lecture, the course has scheduled laboratory sessions. PRQ: MEE 211, MEE 212, and MATH 336.

322. DYNAMIC SYSTEMS AND CONTROL I (3). Modeling of engineering systems, linearization, transfer functions, feedback, PID control, Root-locus and introduction to Bode design. In addition to lecture, the course has scheduled laboratory sessions. PRQ: MEE 321 and ELE 210.

330. MATERIALS SCIENCE (3). Introduction to the relation between processing, structure, properties, and performance of metallic, ceramic, and polymeric engineering materials. In addition to lecture, the course has scheduled laboratory sessions. PRQ: CHEM 210 and CHEM 212 with grade of C or better and PHYS 273 with grade of C or better.

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: MATH 232, MATH 336, and either MEE 209 or MEE 211.

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: MATH 232. CRQ: MEE 211.

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. 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 240, MATH 336, and MEE 211.

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 MEE 211 and MATH 336.

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 ISYE 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 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). Bode design, state-space analysis, controllability, observability, observer design, pole placement, LQR, general 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 322.

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 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 and MEE 270. CRQ: MEE 331.

431. COMPOSITE MATERIALS (3). Fiber and matrix properties, micromechanical and macromechanical behavior of lamina, lamination theory. PRQ: MEE 212, MEE 330, and MEE 380 or MEE 381, or consent of department.

432. LASER MATERIALS PROCESSING (3). Basic operation of lasers and their application in various industrial settings. Subjects include, laser welding, heat treating, cladding, assisted machining of ceramics, additive manufacturing. In addition to lecture, the course has scheduled laboratory sessions. PRQ: MEE 331.

433. ADVANCED MANUFACTURING PROCESSES (3). Advanced manufacturing processes including advanced materials, advanced material removal processes, advanced metal forming processes, hybrid processes, rapid prototyping and advanced polymer processing, joining, manufacturing of microelectronics devices, and computer aided manufacturing. PRQ: MEE 331.

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, and fluid flow networks. 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.

454. ALTERNATIVE AND RENEWABLE ENERGY (3). Introduction to the physics, systems, and methods of non-fossil fuel energy generation. Types of generation methods covered include nuclear, hydroelectric, solar, wind, fuel cells, biomass, and other new technologies. Engineering design projects analyze performance, scalability, and sustainability of alternative and renewable energy. CRQ: MEE 352.

455. ENERGY CONSERVATION AND ENVIRONMENTAL SUSTAINABILITY (3). Concepts of energy efficiency and conservation and the impact on the environment and sustainability in the context of the structures, machines and devices that provide services and comfort for people and society, including electro-mechanical power, thermal comfort, illumination, and other energy conversion processes. Selected engineering design projects will exemplify and detail the energy conservation and environmental sustainability practices including socioeconomic aspects. PRQ: MEE 340 and 350; or ELE 340 or ISYE 440 or TECH 379 or TECH 423.

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 320. 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 321, 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 352, MEE 390, MEE 430, and MEE 470.

482. SENIOR MECHANICAL ENGINEERING DESIGN PROJECT (3). Special design project under individual supervision of the instructor. A writing-intensive course. Specific sections of the course are offered to students pursuing an emphasis in mechanical engineering. PRQ: MEE 481.

C. Emphasis in Advanced Computing and Simulation

E. Emphasis in Sustainable Energy

M. Emphasis in Mechatronics

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.

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 (1-3). 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 (1-3). Topics not included in regular courses. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

Mechanical Engineering Faculty

Pradip Majumdar, Ph.D., Illinois Institute of Technology, professor, chair

Brianno Collier, Ph.D., Cornell University, Presidential Teaching Professor

Behrooz Fallahi, Ph.D., P.E., Purdue University, professor

Jenn-Tereng Gau, Ph.D., Ohio State University, associate professor

Abhijit Gupta, Ph.D., P.E., Pennsylvania State University, professor

Meung Jung Kim, Ph.D., Virginia Polytechnic Institute and State University, professor

Milivoje Kostic, Ph.D., P.E., University of Illinois, Chicago, professor

Nicholas A. Pohlman, Ph.D., Northwestern University, assistant professor

Ji-Chil Ryu, Ph.D., University of Delaware, assistant professor

Federico Sciammarella, Ph.D., Illinois Institute of Technology, associate professor

Scott R. Short, Ph.D., P.E., University of Dayton, assistant professor

Department of Technology (TECH)

Admission to the emphases in Applied Manufacturing Technology, Aviation Management Technology, and Nuclear Engineering Technology is limited. See "Limited Admissions and Limited Retention" in the front part of the catalog.

Mission

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. Instruction in the department seeks to improve productivity, safety, and the well being of society through combining scientific, engineering, and management knowledge with technical skills. The history of the Department of Technology reflects flexibility in the face of change and consistency in the pursuit of excellence to provide lifelong learning by recognized national and international leadership.

Abilities such as leadership, practical applications, problem solving, creativity, intellectual curiosity, and a positive attitude toward lifelong learning are skills that 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 accomplishes this task using a variety of flexible, innovative, interesting, and creative course delivery systems.

Maintaining a high level of professionalism, the faculty remains flexible in the face of change while balancing theory and practice. Thus, individuals are prepared for making a seamless transition to employment becoming productive, contributing members of society.

Educational Objectives

The Department undergraduate programs seek to educate our graduates with skills that will allow them to immediately enter the technical workforce and excel. Graduates of the program will:

- Acquire a well-balanced knowledge in the theory and practice within the areas of technology.
- Utilize laboratory based skills and modern engineering equipment used in industry.
- Provide effective, responsible, and articulate leadership in our complex society.
- Understand the need for obtaining new knowledge, including technological advances, and be capable of self-renewal, and life-long learning.
- Seek and apply creative and analytical insight in the solution of engineering-type problems.
- Provide technical communications in both oral and written forms, using many presentation styles.
- Function as part of an interdisciplinary team and manage projects effectively.

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 multidisciplinary teams; the ability to identify, formulate, and solve technical problems; an understanding of professional and ethical responsibility; the ability to communicate effectively; a broad education necessary to understand the impact of technology 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.

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 (73-74)

- 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 302- Graphic Presentation and Communication (3),
OR ENGL 308 - Technical Writing (3),
OR MGMT 346 - Business Communications (3)
- TECH 375 - Control Systems (3)
- TECH 376 - Electronics II (3)
- TECH 376A - Electronics II Laboratory (1)
- TECH 377 - Microcontrollers and Interfacing (3)
- TECH 377A - Microcontrollers 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 477 - Engineering Technology Senior Design Project I (1)
- TECH 478 - Engineering Technology Senior Design Project II (3)
- Select two of the following (6)
 - TECH 391 - Industrial Quality Control (3)
 - TECH 393 - Structure and Properties of Materials (3)
 - TECH 415 - Applied Industrial Experimental Analysis (3)
 - TECH 417 - Design for Energy Efficiency and Green Materials (3)
 - TECH 420 - Computer-Integrated Manufacturing (3)
 - TECH 443 - Engineering Economy (3)

Select three of the following (9)

- TECH 426 - Electric Systems for Alternative Energy (3)
- 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 475 - Computer Simulation in Electronics (3)
- TECH 476 - Industrial Control Electronics (3)
- TECH 479 - Special Topics in Engineering Technology (3)

Select two of the following (6-7)

- TECH 295 - Manufacturing Computer Applications (3),
OR CSCI 215 - Visual Basic (4)
- TECH 409 - Internship (3)
- TECH 419 - Energy Auditing (3)
- TECH 425 - Programmable Electronic Controllers (3)
- TECH 445 - Industrial Energy Utilization and Environmental Impacts (3)

Requirements outside Department (26-27)

- *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)
- CSCI 240 - Computer Programming in C++ (4)
- *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: 99-101

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 212 - Engineering Dynamics (2)
- TECH 262 - Machine Production Processes (3)
- TECH 265 - Basic Manufacturing Processes (3)
- TECH 295 - Manufacturing Computer Applications (3),
OR CSCI 215 - Visual Basic (4)
- TECH 302 - Graphic Presentation and Communication (3),
OR ENGL 308 - Technical Writing (3),
OR MGMT 346 - Business Communications (3)
- TECH 311 - Computer-Aided Modeling (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 415 - Applied Industrial Experimental Analysis (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)

Select two of the following: (6)

- TECH 260 - Metal Fabrication Processes (3)
- TECH 312 - Design Dimensioning and Tolerancing (3)
- TECH 313 - Product Design and Development for Manufacturability (3)
- TECH 344 - Materials and Processes in the Plastics Industry (3)
- TECH 365 - Metrology (3)
- TECH 416 - Heating, Ventilating and Air Conditioning Technology (3)

- TECH 417 - Design for Energy Efficiency and Green Materials (3)
 - TECH 427 - Testing Methods, Procedures, and Selection of Sustainable Plastics (3)
 - TECH 479 - Special Topics in Engineering Technology (1-3)
- Two of the following (6)
- TECH 305 - Green Technologies (3)
 - TECH 404 - Supervision in Industry (3)
 - TECH 406 - Facilities Management Technology (3)
 - TECH 409 - Internship (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 444 - Production Control Systems (3)
 - TECH 484 - Energy Management (3)
 - TECH 492 - Manufacturing Distribution Applications (3)
 - TECH 496 - Industrial Project Management (3)

Requirements outside Department (22-23)

- *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)
- *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: 97-99

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 (64)

- 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),
OR ENGL 308 - Technical Writing (3),
OR MGMT 346 - Business Communications (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 (26-27)

- *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1),
OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)
- CSCI 240 - Computer Programming in C++ (4)
- *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 Management and Technology

Technology majors cannot use TECH 294 as a TECH Elective or for General Education Credit. Technology majors cannot use TECH 245 for General Education Credit. A grade of C or better is required in MATH 155.

Requirements in Department (72-77)

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),
 OR ENGL 308 - Technical Writing (3),
 OR MGMT 346 - Business Communications (3)
 TECH 391 - Industrial Quality Control (3)
 TECH 404 - Supervision in Industry (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 415 - Applied Industrial Experimental Analysis (3)
 TECH 429 - Plant Location, Layout, and Materials Handling (3)
 TECH 434 - Human Factors in Industrial Accident Prevention (3)
 TECH 492 - Manufacturing Distribution Applications (3)
 TECH 496 - Industrial Project Management (3)

Two of the following (6)

TECH 305 - Green Technologies (3)
 TECH 402 - Industrial Training and Evaluation (3)
 TECH 415 - Applied Industrial Experimental Analysis (3)
 TECH 442 - Work Simplification and Measurement (3)
 TECH 443 - Engineering Economy (3)
 TECH 444 - Production Control Systems (3)
 TECH 484 - Energy Management (3)

Technology courses chosen with the advice and consent of the departmental adviser (6-8)

One of the following areas of study (23-26)

Computer-Aided Design (24)

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 365 - Metrology (3)
 TECH 414 - Computer-Aided Machine Design (3)

Two of the following (6)

TECH 260 - Metal Fabrication Processes (3)
 TECH 344 - Materials and Processes in the Plastics Industry (3)
 TECH 409 - Internship (3)
 TECH 417 - Design for Energy Efficient and Green Materials (3)
 TECH 420 - Computer-Integrated Manufacturing (3)
 TECH 427 - Testing Methods, Procedures, and Selection of Sustainable Plastics (3)

Electronics Technology (25-26)

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),
 OR CSCI 215 - Visual Basic (4)
 TECH 377 - Microcontrollers and Interfacing (3)
 TECH 377A - Microcontrollers and Interfacing Laboratory (1)
 Two of the following (6)
 TECH 409 - Internship (3)
 TECH 425 - Programmable Electronic Controllers (3)
 TECH 426 - Electric Systems Applications for Alternative Energy (3)
 TECH 430 - Microcontrollers Interfacing and Applications (3)
 TECH 473 - Advanced Digital Design (3)

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 Prevention and Sustainable Production (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)
 Two of the following (6)
 TECH 409 - Internship (3)
 TECH 411 - Greening Industrial Operations (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 433 - Toxicology for Industry (3)
 TECH 435 - Legal Aspects of Safety (3)
 TECH 485 - 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 409 - Internship (3)
 TECH 417 - Design for Energy Efficiency and Green Materials (3)
 TECH 427 - Testing Methods, Procedures, and Selection of Sustainable Plastics (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. Students in this area of study are exempt from the 30 semester hour university residence requirement.

Requirements outside Department (17-18)

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)
 *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: 89-95

Emphasis 5. Aviation Management Technology

Admission to the aviation management technology emphasis is limited to students who possess an A.A.S. degree in aviation maintenance technology from a community college. Entry into this program also requires that the students complete their F.A.A. Airframe and Power Plant certificates. Students in this emphasis are exempt from the 30 semester hour university residence requirement. A grade of C or better is required in MATH 155.

Aviation Maintenance Certification (31)

Requires a completed A.A.S. degree in aviation maintenance from a community college and completed F.A.A. Airframe and Power Plant certificates.

Requirements in Department (45)

TECH 302- Graphic Presentation and Communication (3),
 OR ENGL 308 - Technical Writing (3)
 TECH 391 - Industrial Quality Control (3)
 TECH 404 - Supervision in Industry (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 429 - Plant Location, Layout, and Materials Handling (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 434 - Human Factors in Industrial Accident Prevention (3)
 TECH 484 - Energy Management (3)
 TECH 496 - Industrial Project Management (3)

Technology Electives

Two of the following (6):

TECH 305/ENVS 305X - Green Technologies (3)
 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 492 - Manufacturing Distribution Applications (3)
 TECH 497 - Workshop in Technology (1-6)
 TECH course work with advice and consent of departmental adviser (12)

Requirements outside Department (17)

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)
 *PHYS 150A - Physics (4)
 *STAT 208 - Basic Statistics (3)

Total Hours for Emphasis 5, Aviation Management Technology: 93

Emphasis 6. Energy and Environmental Technology**Requirements in Department (58-59)**

TECH 175 - Electricity and Electronics Fundamentals (3)
 TECH 175A - Electricity and Electronics Fundamentals Laboratory (1)
 TECH 211 - Computer-Aided-Design (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)
 TECH 262 - Machine Production Processes (3)
 TECH 265 - Basic Manufacturing Processes (3)
 TECH 295 - Manufacturing Computer Applications (3),
 OR CSCI 215 - Visual Basic (4)
 OR CSCI 240 - Computer Programming in C++ (4)
 TECH 302- Graphic Presentation and Communication (3),
 OR ENGL 308 - Technical Writing (3),
 OR MGMT 346 - Business Communications (3)
 TECH 305/ENVS 305X - Green Technologies (3)
 TECH 326 - Fluid Power Technology (3)
 TECH 391 - Industrial Quality Control (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 411 - Greening Industrial Operations (3)
 TECH 416 - Heating, Ventilating and Air Conditioning Technology (3)
 TECH 417 - Design for Energy Efficiency and Green Materials (3)
 TECH 419 - Energy Auditing (3)
 TECH 426 - Electric Systems Applications for Alternative Energy (3)
 TECH 443 - Engineering Economy (3)
 TECH 484 - Energy Management (3)
 TECH 496 - Industrial Project Management (3)

Technical Electives (6)

Select two of the following (6):

ENVS 301 - Environmental Sciences I: Physical Systems (3)
 ENVS 302 - Environmental Sciences II: Biological Systems (3)
 GEOG 455 - Land-Use Planning (3)
 GEOG 459 - Geographic Information Systems (3)
 TECH 231 - Safety Programs (3)
 TECH 311 - Computer-Aided Modeling (3)
 TECH 409 - Internship (3)
 TECH 415 - Applied Industrial Experimental Analysis (3)
 TECH 425 - Programmable Electronic Controllers (3)

TECH 427 - Testing Methods, Procedures, and Selection of Sustainable Plastics (3)
 TECH 436 - Design and Administration of Industrial Safety Programs (3)
 TECH 479 - Special Topics in Engineering Technology (3)

Requirements outside Department (27-28)

*CHEM 110 - Chemistry (3) AND *CHEM 111 - Chemistry Laboratory (1),
 OR *CHEM 210 - General Chemistry 1 (3) AND CHEM 212 - General Chemistry Laboratory (1)
 ENVS 304 - Environmental Law, Policy, and Economics (3)
 GEOG 256 - Maps and Mapping (3)
 GEOG 359 - Introduction Geographic Information Systems (3)
 *MATH 155 - Trigonometry and Elementary Functions (3)
 *MATH 229 - Calculus 1 (4)
 *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 6, Energy and Environment Technology: 91-93

Emphasis 7. Applied Manufacturing Technology

This area of study is limited to transfer students with an Associates of Applied Science degree with a major in a recognized technical area. With the approval of the NIU Department of Technology adviser and chair, up to 43 hours of proficiency credit, which includes up to 9 hours of upper upper-level credit, can be used towards the 120-semester hour total and 40 semester-hour upper-level university graduation requirements.

Students in this emphasis are exempt from the 30 semester-hour university residence requirement. All students in this emphasis must obtain a grade of C or better in MATH 155 and all majors must meet NIU's requirements for general education (29-41 hours).

Requirements in Department (36)

TECH 211 - Computer-Aided Design (3)
 TECH 302 - Graphic Presentation and Technical Communication (3)
 TECH 391 - Industrial Quality Control (3)
 TECH 404 - Supervision in Industry (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 429 - Plant Location, Layout, and Materials Handling (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 434 - Human Factors in Industrial Accident Prevention (3)
 TECH 492 - Manufacturing Distribution Applications (3)
 TECH 496 - Industrial Project Management (3)

Two of the following (6):

TECH 305/ENVS 305X - Green Technologies (3)
 TECH 402 - Industrial Training and Evaluation (3)
 TECH 435 - Legal Aspects of Safety (3)
 TECH 442 - Work Simplification and Measurement (3)
 TECH 444 - Production Control Systems (3)
 TECH 484 - Energy Management (3)

Requirements outside Department (10)

*MATH 155 - Trigonometry and Elementary Functions (3)
 *PHYS 150A - Physics (4)
 *STAT 208 - Basic Statistics (3)

Total Hours for Emphasis 7, Applied Technology: 89

Minor in Electrical Engineering Technology (20)

Students majoring in the Department of Technology may also complete the requirements for the electrical engineering minor.

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 Energy Technology (24)

Students majoring in Technology may also complete the requirements for the Energy Technology minor.

TECH 245 - Business Pollution Prevention and Sustainable Production (3)
 TECH 305 - Green Technologies (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 416 - Heating, Ventilating and Air Conditioning (3)
 TECH 417 - Design for Energy Efficiency and Green Materials (3)
 TECH 419 - Energy Auditing (3)
 TECH 445 - Industrial Energy Utilization and Environmental Impacts (3)
 TECH 484 - Energy Management (3)

Minor in Environmental Management Systems

Requirements (24)

ENVS 304 - Environmental Law, Policy, and Economics (3)
 GEOG 256 - Maps and Mapping (3),
 OR GEOG 303 - Water Resources and the Environment (3)
 GEOG 455 - Land-Use Planning (3)
 OMIS 338 - Principles of Operations Management (3)
 TECH 245 - Business Pollution Prevention and Sustainable Production (3)
 TECH 406 - Facilities Management Technology (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 484 - Energy Management (3)

Minor in Manufacturing Engineering Technology (24)

Students majoring in the Department of Technology may also complete the requirements for the manufacturing engineering minor.

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. Students majoring in the Department of Technology may also complete the requirements for the productivity minor.

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 - Business Pollution Prevention and Sustainable Production (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)
 TECH 481 - Ergonomics (3)
 Two of the following (6)
 TECH 431 - Industrial Ventilation (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 433 - Toxicology for Industry (3)
 TECH 435 - Legal Aspects of Safety (3)
 TECH 440 - Monitoring and Evaluating Exposures to Hazardous Materials (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 - Risk Management (3)

Certificate of Undergraduate Study

The Department of Technology participates in the Homeland Security Certificate of Undergraduate Study. See the section on Inter-College Interdisciplinary Certificates in this catalog for details or visit the Homeland Security website at <http://www.niu.edu/HomelandSecurity/index.shtml>.

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 with a C or better 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.

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 intermediate computer-aided drafting through the use of a three dimensional solid modeling software package. Learn how to apply the parametric features of a solid model, to provide an accurate graphical representation of a part, and to effectively capture the design intent. Learn how to create detailed drawings, orthographic projections and assembly representations.

212. 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.

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 PREVENTION AND SUSTAINABLE PRODUCTION (3). Study of environmental and occupational health issues related to the design, manufacture, and application of technology. Analysis of case studies to evaluate potentially adverse outcomes and prevention through compliance with environmental regulations and voluntary standards (EPA, OSHA, ISO). Application and implementation of environmentally sustainable design and manufacturing, and pollution prevention practices. Technology majors cannot use TECH 245 for general education credit.

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 with a C or better.

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 with a C or better and TECH 175 with a C or better. 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: Either PHYS 211 or both TECH 175 and TECH 175A. 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 with a C or better and TECH 265.

302. GRAPHIC PRESENTATION AND COMMUNICATION (3). Graphical communication methodology and data presentation within written and oral formats. Utilization of manufacturing graphics produced in a CAD environment. Integration of proper writing techniques, data, and theory into technical reports and short communications using drawings, charts, and graphs for industrial applications. PRQ: TECH 211 and TECH 265.

305. GREEN TECHNOLOGIES (3). *Crosslisted as ENVS 305X*. Introduction to environmentally friendly engineering and technological advances and new technologies that utilize green principles and green transportation. Course includes topics in new areas of green manufacturing and materials used today and planned for the future, including the operation and manufacture of solar cells and the production of wind, thermal, and hydroelectric power. Topics will vary depending upon new trends in industry. PRQ: MATH 155 with a C or better; or MATH 211 or MATH 229 or MATH 230; and CHEM 100 or CHEM 110 or CHEM 210 or PHYS 140.

311. COMPUTER-AIDED MODELING (3). Intermediate and advanced solid modeling techniques and complex shape modeling including surface creation and manipulation, spline and curve generation, and model evaluation. Use of the parametric feature of a solid model to provide an accurate graphical representation of a part and to effectively capture the design intent. PRQ: Must have a C or better in 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: MATH 155 with a C or better, and TECH 211 and TECH 265.

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: MATH 155 and 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 229, 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. PRQ: CHEM 110 or CHEM 210, and MATH 155 with a C or better, and TECH 265 or MEE 330.

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 OR MEE 330.

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: TECH 262 and either CSCI 215 or CSCI 240 or TECH 295, or consent of department.

365. METROLOGY (3). Precision measurement techniques including laboratory experience with optical, electronic, and mechanical comparators, light wave measuring devices, use of precision gage blocks, and surface finish analysis. PRQ: MATH 155 with a C or better 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 nonlinear 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. MICROCONTROLLERS AND INTERFACING (3). Analysis of microcontrollers with emphasis on architecture, instruction set, state diagrams, machine cycles, and interfacing techniques. PRQ: TECH 277. CRQ: TECH 377A.

377A. MICROCONTROLLERS 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: MATH 155 with a C or better, 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: MATH 155 with a C or better; and CHEM 110 and CHEM 111; or CHEM 210 and CHEM 212; and TECH 265.

398. INDIVIDUAL PROBLEMS IN TECHNOLOGY (1-6).

- 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. Environmental Health and Safety
- 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.

406. FACILITIES MANAGEMENT TECHNOLOGY (3). Overview of the technology facility management responsibilities, policies, and practices that are involved with implementing and/or managing technology properties that have sustainable goals connected to it. Identification of competencies needed by the technology facility management function to properly design, operate, and maintain facilities within the scope of responsibilities of technology facilities managers.

409. INTERNSHIP (3). 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 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.

411. GREENING INDUSTRIAL OPERATIONS (3). Analysis of the production processes of selected industrial sectors, their specific environmental and human health/safety impacts, multiple approaches to mitigate the impacts, and the financial benefits of resource and waste reduction. Addresses potential hazards of emerging materials and technologies. Integrated environmental, health and safety auditing of applicable EPA, OSHA, and international environmental regulations. PRQ: TECH 245 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 211.

415. **APPLIED INDUSTRIAL EXPERIMENTAL ANALYSIS (3).** Application of experimental methods to common problems in manufacturing and electronics. Appropriate data analysis, design concepts, cost estimation, and presentation of results and solutions with specific emphasis on applied problems in manufacturing environments. Industrially relevant, commonly available software will be used as a problem solving tool whenever possible. PRQ: MATH 155 with a C or better and STAT 208.

416. **HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY (3).** Applications of heating, ventilating, and air conditioning systems. Overview of heat transfer, fluids, thermodynamics, and psychometrics. Heating and cooling thermal load calculations for conditioned spaces and structures. Selection of heating and cooling components and integration into systems. Applications for residential, institutional, commercial, industrial, and manufacturing spaces. Calculation of energy savings versus costs among competing systems. Topics from an applied perspective of technology practices and responsibilities involved with conditioning various buildings and enclosed environments. PRQ: MATH 155 with a C or better, and PHYS 150A or PHYS 210.

417. **DESIGN FOR ENERGY EFFICIENCY AND GREEN MATERIALS (3).** Overview of energy forms, sources, generation, devices, systems, and materials. Review of the physics of energy transformation and conservation. Energy efficiencies of components and systems from stationary and transportation sectors. Energy-efficient design in residential, commercial, industrial, and manufacturing systems. Sustainability, environmental impacts, economic and social issues, and global governmental policies. Potential of alternative energy sources. Use of eco-friendly materials to improve efficiency. Topics from an applied perspective of technology practices, management, responsibilities, and policies involved with implementing energy conservation designs. PRQ: MATH 155 with a C or better, and PHYS 150A or PHYS 210.

418. **BIOBASED FUELS AND ALTERNATIVE ENERGY APPLICATIONS (3).** Overview of biofuel sources, production, and applications. Review of conventional energy supplies and uses. The study of liquid and gaseous fuels derived from plant and animal matter, utilizing of biofuels for combustion, stationary power, and transportation. Study of biofuels used in conventional and alternative manners; sustainability, environmental impacts, economic and social issues, and global governmental policies. Topics from an applied perspective of technology practices, management, responsibilities, and policies involved with implementing large-scale consumption of biofuels. PRQ: MATH 155 with a C or better, and CHEM 110 or CHEM 210.

419. **ENERGY AUDITING (3).** Methods of auditing energy consumption primarily in commercial and industrial operations. Energy auditing provides a means of determining the flow of energy, both productively used and wasted in a given facility. Methods of determining energy consumption through direct measurement and through engineering estimates are covered. PRQ: MATH 155 with a C or better.

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 211 and TECH 265 and either PHYS 211 or both TECH 175 and TECH 175A 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 265 and either PHYS 211 or both TECH 175 and TECH 175A, and either TECH 295 or CSCI 215 or CSCI 240 or consent of department..

426. **ELECTRIC SYSTEMS APPLICATIONS FOR ALTERNATIVE ENERGY (3).** Applications of electric systems to capture, store, condition, and utilize alternative energy sources. Topics include solar energy, wind energy, fuel cell and smart grid. PRQ: MATH 155 with a C or better; and PHYS 211, or TECH 175 and TECH 175A.

427. **TESTING METHODS, PROCEDURES, AND SELECTION OF SUSTAINABLE PLASTICS (3).** Study of plastics (polymers) with emphasis on energy-efficient, renewable, and recycled thermoplastics, thermosets 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 210.

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. PRQ: MATH 155 with a C or better and TECH 265.

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 with a C or better, TECH 245, TECH 434, or consent of department.

432. **DISASTER PREPAREDNESS (3).** Introduction to the field of homeland security, emergency management, business continuity planning, and disaster preparedness. Discussion of the risks and hazards associated with planned events, emergencies, natural, human-made, and technological disasters. Emphasis on hazard recognition, planning, mitigation, response, and recovery from these types of events. Enrollment not open to students with credit in UNIV 310.

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 with a C or better, 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 stressproducing conditions including noise, ventilation, temperature, radiation, lighting, and their effect on human performance and productivity. PRQ: CHEM 110, CHEM 111, MATH 155 with a C or better, 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 EXPOSURES TO HAZARDOUS MATERIALS (3).** Theory and methodology of evaluating exposures to hazardous materials, risk assessment techniques, and exposure response. Detailed examination of human exposure to chemicals, biological and radioactive agents. 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 with a C or better, 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. PRQ: TECH 265 and MATH 155 with a C or better.

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. PRQ: MATH 155 with a C or better.

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: MATH 155 with a C or better, TECH 265; or consent of department.

445. **INDUSTRIAL ENERGY UTILIZATION AND ENVIRONMENTAL IMPACTS (3).** Organizational approaches to establish, implement, maintain and improve industrial energy and sustainability, including ISO 50001 energy management systems and lean principles. Approaches apply to all aspects of energy use and enable an organization to take a systematic approach to achieving continual improvement of energy and environmental sustainability performance. Implementation of lean practices prevents pollution, reduces waste and highlights opportunities to reuse. How to define, develop and manage sustainable solutions including core concepts associated with leadership in energy and environmental design (LEED) and greenhouse gas inventory methods are covered. Topics will be discussed from an applied perspective of technology practices, management, responsibilities, and policies. PRQ: MATH 155 with a C or better, and CHEM 110 or CHEM 210.

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 277 and TECH 277A.

475. **COMPUTER SIMULATION IN ELECTRONICS (3).** Use of computer software in the design, troubleshooting and simulation of electronic circuitry. Emphasis is placed on the different analysis provided by the circuit simulator: AC Analysis, Fourier Analysis, Noise and Distortion Analysis, Parameter and Temperature sweeps analysis, Worst Case and Monte Carlo Analysis; also, the use of Multisim to create IC components that are not included in the simulator database. PRQ: TECH 271 and TECH 276.

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 or MGMT 346, 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. Can enroll in multiple sections in a single semester. PRQ: TECH 477.

479. **SPECIAL TOPICS IN ENGINEERING TECHNOLOGY (3).** Current topics of interest. May be repeated to a maximum of 6 semester hours provided no repetition of topic occurs. Can enroll in multiple sections in a single semester. 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 with a C or better, 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 with a C or better, 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. PRQ: MATH 155 with a C or better.

485. **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 with a C or better, 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 STAT 208 or STAT 301, or consent of the department.

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: ENGL 308 or MGMT 346, TECH 429 or TECH 419, and TECH 415 or TECH 416; and senior status; or consent of the department.

497. WORKSHOP IN TECHNOLOGY (1-6). 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 6 semester hours.

Technology Faculty

Clifford R. Mirman, Ph.D., University of Illinois, Chicago, Presidential Engagement Professor, chair

Abul Azad, Ph.D., University of Sheffield (United Kingdom), associate professor

Liping Guo, Ph.D., Auburn University, associate professor

Theodore J. Hogan, Ph.D., C.I.H., University of Illinois, Chicago, assistant professor

Sarveswara (Rao) Kilaparti, Ph.D., Northwestern University, associate professor

Kevin Martin, Ph.D., University of Missouri, assistant professor

William J. Mills, Ph.D., University of Illinois, Chicago, assistant professor

Shanthi Muthuswamy, Ph.D., University of New York, assistant professor

Andrew W. Otieno, Ph.D., University of Leeds (Britain), professor

Said Oucheriah, Ph.D., P.E., Cleveland State University, professor

David J. Schroeder, Ph.D., University of Illinois, associate professor

Shun Takai, Ph.D., Stanford University, assistant professor

Robert Tatara, Ph.D., Northwestern University, professor

Promod Vohra, Ed.D., P.E., Northern Illinois University, professor

College of Health and Human Sciences

Derryl Block, Ph.D., dean

James R. Ciesla, Ph.D., associate dean for research and resources

Beverly W. Henry, Ph.D., associate dean for academic affairs

The departments and schools of the College of Health and Human Sciences offer baccalaureate programs leading to the degree Bachelor of Science (B.S.) and Bachelor of Science in Education (B.S.Ed.). The College of Health and Human Sciences offers a contract major leading to the B.S. degree and a B.G.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 graduate-level study. Some programs require graduate study for career entry at the professional level.

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. Relationships with these agencies and institutions facilitate 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 programs/emphases include medical laboratory sciences (National Accrediting Agency for Clinical Laboratory Sciences); early childhood studies, health education, and family and consumer sciences education (National Council for Accreditation of Teacher Education and Illinois State Board of Education); nutrition and dietetics (Commission on Accreditation of Dietetics Educators); nursing (Commission on Collegiate Nursing Education). Other programs in the college are accredited at the graduate level when that is the entry level for the profession.

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. The vision of the college is to enhance the lives of individuals, families, and communities across the lifespan.

Department/School Names and Undergraduate Programs Offered

School of Allied Health and Communicative Disorders

B.S. in medical laboratory sciences ¹

B.S. in communicative disorders

B.S. in health sciences

School of Family, Consumer, and Nutrition Sciences

B.S. in nutrition, dietetics, and hospitality management

B.S. in early childhood studies ¹

B.S. in family and child studies ¹

B.S. in textiles, apparel, and merchandising

Department of Military Science

School of Nursing and Health Studies

B.S.Ed. in health education

B.S. in nursing ¹

B.S. in public health

Academic Advising

Academic advisers in the college office assist students in establishing academic goals and course selection and in interpreting university and college policies and requirements. At the department level, faculty advisers assist declared majors in degree completion and setting professional goals.

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.

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 Clinical/Practicum Requirements

Students who select majors in the College of Health and Human Sciences may need to meet specific clinical/practicum requirements for their academic programs and/or entry into their chosen professions, such as a criminal background check, drug testing, immunizations and flu shots, proof of immunity, TB test, cardiopulmonary resuscitation (CPR) certification, uniforms, and equipment. The student is generally responsible for the costs of meeting these requirements. Professional liability and general liability insurance are generally included as part of course fees when required. Students may be unable to progress in programs if there is a positive drug screen, prior criminal record, or they do not fulfill other special clinical requirements such as immunizations. Refer to the specific program for additional information on these and other requirements.

¹ This is a limited admissions program, placement in which is highly competitive. See "Limited Admissions Requirements" in the Admission section of this catalog.

Policy on Dismissal

Students must make satisfactory progress in college programs to be allowed to continue and can be dismissed from the program or a class for academic reasons, behavior not accepted in the profession, or actions that threaten the health and safety of others. It is the responsibility of students to secure a copy of the dismissal policy from the program.

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.

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 Health and Human 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. 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 practicing health or human sciences professionals who hold a current professional credential, certificate, or license in a health or human sciences field and have completed an applied associates degree program or equivalent number of credits. The professional credential, certificate or license must be in the field in which the applicant is working or attempting to work.

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 apply for this the B.G.S. degree must

- be admitted to NIU.

- have a cumulative GPA of at least 2.00.

- submit a B.G.S. application including a written professional goals statement and copy of the professional credential. The B.G.S. application is available through the College of Health & Human Sciences advising office.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

B.G.S. Requirements (50)

Core Courses (42)

- *AHRS 200 - Disability in Society (3)
- *FCNS 280 - Human Development, the Family, and Society (3)
- IDSP 465 - Issues in Gerontology (3)
- *PHHE 295 - Introduction to Public Health, OR PHHE 206 - Contemporary Health Concepts (3)
- *PSYC 102 - Introduction to Psychology (3)
- *STAT 208 - Basic Statistics (3)
- UHHS 310 - Introduction to Health and Human Sciences (3)
- UHHS 350 - Critical Thinking for Health and Human Services Professionals (3)
- UHHS 410 - Legal and Ethical Issues for Health and Human Sciences Professionals (3)
- UHHS 430 - Working with Diverse Populations in Health and Human Sciences (3)
- UHHS 450 - Administration for Professionals in Health and Human Sciences (3)
- UHHS 455 - Management of Financial Resources in Health and Human Sciences Organizations (3)
- UHHS 460 - Introduction to Research in Health and Human Sciences (3)
- UNIV 310 - Foundations in Homeland Security and Disaster Preparedness (3)
OR TECH 432 - Disaster Preparedness (3)

Electives (8)

Electives selected with the approval of a B.G.S. adviser.

In addition, B.G.S. students must complete 30 semester hours at NIU, excluding proficiency credit.

Upon successful completion of all B.G.S. requirements, 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. Students in this program are exempt from the 30 semester hour university residence requirement.

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.

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 (3-9)
UHHS 466² - Topics in Gerontology (3)
UHHS 467² - Fieldwork in Gerontology (3)

Other Courses Related to Gerontology (3-9)

ANTH 465 - Medical Anthropology (3)
*BIOS 109 - Human Biology (3)
FCNS 201 - Human Nutrition (3)
*FCNS 280 - Human Development, the Family, and Society (3),
OR PSYC 225 - Lifespan Development: Childhood Through Adulthood (3)
FCNS 486 - Aging and the Family (3)
KNPE 454 - Exercise Gerontology (3)
KNPE 493 - Supervised Clinical Experience in Exercise Gerontology (2)
PHHE 410 - Death Education (3)
PHHE 433 - Principles of Long-Term Care Administration (3)
POLS 326 - Nonprofit Management (3),
OR PSPA 326X - Nonprofit Management (3)
PSYC 425 - Adult Development and Aging (3)
PSYC 465 - Advanced Developmental Psychology (3)
SOCI 356 - 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)
UHHS 301¹ - Independent Study in Health and Human Sciences (3)

Certificates of Undergraduate Study

Gerontology (15)

Drawing from relevant disciplines, this certificate is designed to examine the multifaceted implications of aging. It is open to all NIU undergraduates. Students must maintain a good academic standing in the university, achieve a minimum grade of C in each certificate course, achieve a GPA of 2.50 in all certificate courses, and complete all certificate course work within six calendar years.

Core Courses (6)

IDSP 465 - Issues in Gerontology (3)
UHHS 466 - Topics in Gerontology (3),
OR UHHS 465 - Fieldwork in Gerontology (3)

Additional Courses (9)

One course selected from each of the following sets (9):
SOCI 451 (3); SOCI 460 (3); SOCI 482 (3)
FCNS 280 (3); PSYC 225 (3); PSYC 425 (3); PSYC 465(3)
BIOS 109 (3); FCNS 310 (3); NURS 435 (2); NURS 463 (3)
OR With the approval of the Gerontology program director, a student may substitute UHHS 301 (Independent Study in Health and Human Sciences) for up to six (6) semester hours of additional courses.

Interdisciplinary Courses Offered by the College of Health and Human Sciences (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.

200. EXPERIENCES IN HEALTH AND HUMAN SCIENCES I (3-30). 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.

300. EXPERIENCES IN HEALTH AND HUMAN SCIENCES II (3-30). 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.

301. INDEPENDENT STUDY IN HEALTH AND HUMAN SCIENCES (1-3). 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.

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. PRQ: CHHS major with at least junior standing or admission to the HHS B.G.S. major.

350. CRITICAL THINKING FOR HEALTH AND HUMAN SERVICES PROFESSIONALS (3). *Crosslisted as NURS 349X*. Development of critical thinking skills as applied to health and human services professionals. PRQ: Admission to an academic program in the College of Health and Human Sciences.

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: CHHS major with at least junior standing or admission to the HHS B.G.S. major.

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: CHHS major with at least junior standing or admission to the HHS B.G.S. major.

* Available for general education credit.

¹ When topic is related to gerontology.

² May be repeated to a maximum of 6 semester hours if topic changes.

450. ADMINISTRATION FOR PROFESSIONALS IN HEALTH AND HUMAN SCIENCES (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: CHHS majors with at least junior standing or admission to the HHS B.G.S. major.

455. MANAGEMENT OF FINANCIAL RESOURCES IN HEALTH AND HUMAN SCIENCES ORGANIZATIONS (3). Survey of accounting and finance techniques used by department-level health and human sciences managers. Emphasis on third-party reimbursement mechanisms, the regulatory environment, interpreting financial accounting statements, and applying managerial accounting techniques. Topics include cost behavior analysis, budgeting, planning, financial ratios, cost-volume-profit analysis, discounted cash-flow analysis and related applications of accounting and finance in health and human sciences organizations. PRQ: CHHS major with at least junior standing or admission to the HHS B.G.S. major.

460. INTRODUCTION TO RESEARCH IN HEALTH AND HUMAN SCIENCES (3). An introductory course in the research process for students in health and human sciences. General concepts of research and evidence-based practice. PRQ: STAT 208 or STAT 301 or UBUS 223; and CHHS major with at least junior standing or admission to the HHS B.G.S. major.

466. TOPICS IN GERONTOLOGY (3). Exploration of current topics in the study of health and aging. Possible areas of coverage include: Bio-psycho-social dimensions of age and aging, or the public policy challenges of age and aging. May be repeated to a maximum of 6 semester hours if topic changes. PRQ: IDSP 465 and junior standing or consent of college.

467. FIELDWORK IN GERONTOLOGY (3). Application of gerontological concepts to a real-world setting through an internship or other applied learning experience. Partners collaborating to provide the fieldwork experience might include long-term care facilities, elder-service provider agencies, or other relevant organizational settings outside the university with a focus on older people. May be repeated to a maximum of 6 semester hours. PRQ: IDSP 465 and junior standing or consent of college.

470. WORKSHOP IN HEALTH AND HUMAN SCIENCES (1-3). Study of interdisciplinary topics in health and human sciences and application of principles to problems of special interest. Nature and extent of workshop dependent upon topic and needs of students. May be repeated or taken concurrently for a maximum of 6 semester hours. PRQ: At least junior standing. PRQ: CHHS major with at least junior standing or admission to the HHS B.G.S. major.

School of Allied Health and Communicative Disorders (AHCD, AHLS, AHPT, AHRS, COMD)

Admission to the major in medical laboratory sciences is limited. See "Limited Admissions and Limited Retention Requirements" in the front part of this catalog.

The School of Allied Health and Communicative Disorders offers majors in medical laboratory sciences (B.S.), communicative disorders (B.S.), health sciences (B.S.), a minor in communicative disorders, and a baccalaureate degree completion program. Students interested in one of the school's majors or minors should contact the college advising office as early as possible. Failure to do so could result in delayed graduation.

Majors in the School of Allied Health and Communicative Disorders 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.

Medical Laboratory Sciences

General Information

Admission to the majors in medical laboratory sciences is limited. See "Limited Admissions and Limited Retention Requirements" in the front part of this catalog.

The medical laboratory sciences program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. To become certified as a Medical Laboratory Scientist (MLS), the graduate of the program must be examined for professional competence by the Board of Certification. Completion of the examination, however, is not a prerequisite for the B.S. degree.

Once admitted into the medical 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.

Clinical placements at affiliated hospitals require the student to provide and incur cost for the following:

- student liability insurance;
- cardiopulmonary resuscitation (CPR) certification;
- drug screen;
- blood titers for hepatitis B, Rubella, Rubeola, Mumps, Varicella zoster;
- 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 medical laboratory sciences major or before students at NIU enroll in AHLS 211, Introduction to the Medical Laboratory Sciences;
- transportation and room/board for clinical courses.

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 medical laboratory sciences major and all AHLS 300-level courses must have been completed with a grade of C or better. AHLS 300- and 400-level designated courses are open only to students admitted to the medical laboratory sciences program and are current majors.

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 the Board of Certification or equivalent and a minimum of two years of experience working full-time as a CLT/MLT, must demonstrate the competencies required of all preclinical laboratory sciences majors. Once formally admitted into the major, students must complete the following courses, with a grade of C or better: AHCD 440 or AHLS 446, AHLS 301, AHLS 302, AHLS 303, AHLS 308, AHLS 336, AHLS 344; AHLS 448 or UHHS 460; and 14 semester hours of AHLS 470. Upon successful completion of these courses, the degree completion student may be awarded up to 16 semester hours of proficiency credit. Students in this program are exempt from the 30-semester-hour university graduation residence requirement.

Individuals who are certified as clinical or medical laboratory technicians and who desire to complete the requirements for the B.S. in clinical or medical laboratory sciences are advised to contact the program coordinator for specific information.

Major in Medical Laboratory Sciences (B.S.)

The medical laboratory sciences program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (60-64)

- AHCD 318 - Medical Terminology (3)
- AHCD 440 - Introduction to Teaching in the Allied Health Professions (1)
- AHLS 211 - Introduction to the Medical Laboratory Sciences (3)
- AHLS 300 - Urinalysis (2)
- AHLS 301 - Immunology (2)
- AHLS 302 - Hematology/Hemostasis (3)
- AHLS 303 - Immunohematology (2)
- AHLS 308 - Body Fluids (1)
- AHLS 311 - Immunology Laboratory (1)
- AHLS 312 - Hematology/Hemostasis Laboratory (2)
- AHLS 313 - Immunohematology Laboratory (1)
- AHLS 336 - Medical Diagnostic Microbiology /Mycology/Parasitology (4)
- AHLS 337 - Medical Diagnostic Microbiology /Mycology/Parasitology Laboratory (2)
- AHLS 344 - Medical Diagnostic Biochemistry (3)
- AHLS 345 - Medical Diagnostic Biochemistry Laboratory (2)
- AHLS 446 - Principles of Laboratory Management and Practice (1),
OR UHHS 450 - Administration for Professionals in Health and Human Sciences (3)

AHLS 448 - Introduction to Research in Medical Laboratory Sciences (2),
OR UHHS 460 - Introduction to Research in Health and Human Sciences (3)
AHLS 470 - Topics in Applied Medical Laboratory Sciences (18)
A. Clinical Hematology/Hemostasis (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)
AHLS 471 - Molecular Testing and Advanced Lectures (6)
AHLS 475 - Medical Laboratory Sciences Competency (1)

Requirements outside School (34-35)

BIOS 208 - Fundamentals of Biology I (3), and
BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 209 - 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 210 - General Chemistry I (3), and
*CHEM 212 - General Chemistry Laboratory I (1)
*CHEM 211 - 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),
OR BIOS 303 - Cell Biology (3)
*STAT 208 - Basic Statistics (3)

Total Hours for a Major in Medical Laboratory Sciences: 94-99

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 medical 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.

Major in Communicative Disorders (B.S.)

Students in this major may combine interests in communicative disorders with preparation for advanced study in fields as speech-language pathology, audiology, medical sciences, dentistry, physical or occupational therapy, community health, physiology, psychology, linguistics, education, rehabilitation counseling, or law.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (43)

AHCD 318 - Medical Terminology (3)
AHRS 200 - Disability in Society (3)
AHRS 493 - Counseling in Communicative Disorders (3)
COMD 220 - Introduction to Communicative Disorders (3)
COMD 221 - Phonetics and Phonology (3)
COMD 300 - Introduction to Audiology (3)
COMD 305 - Language Development (3)
COMD 323 - Anatomy and Physiology of the Speech and Hearing Mechanisms (3)

COMD 325 - Introduction to Hearing and Speech Science (4)
COMD 330 - Neuroscience of Communication and Associated Behaviors (3)
COMD 429 - Assessment Procedures in Communicative Disorders (3)
COMD 435 - Clinical Methods (3)
Two of the following (6)
AHRS 101 - Elementary American Sign Language I (3)
COMD 421 - Aural Rehabilitation (3)
COMD 423 - Developmental Speech and Language Disorders (3)
COMD 424 - Stuttering and Voice Disorders (3)

Requirements outside School (18-21)

*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),
OR *MATH 155 - Trigonometry and Elementary Functions (3)
*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)
IDSP 465 - Issues in Gerontology (3)
PSYC 425 - Adult Development and Aging (3)
One of the following (3-4)
*PHYS 150 - Physics (3)
*PHYS 180 - Acoustics, Music, and Hearing (3)
*PHYS 210 - General Physics I (4)

Total Hours for a major in Communicative Disorders: 70-77

Major in Health Sciences (B.S.)

The Bachelor of Science in Health Sciences program is designed to prepare the student to enter allied health and other health-related fields. The health sciences program focuses on providing the student with a strong foundation through general education courses and a science-based curriculum. Students in the major have the choice of two emphases: pre-physical therapy and rehabilitation services.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1: Pre-Physical Therapy

Students choosing this emphasis are typically interested in pursuing careers in health-related fields that require a graduate degree for practice. The required course work provides the foundation needed to enter health-related professional programs.

Requirements in School (21)

AHCD 318 - Medical Terminology (3)
AHPT 405 - Physical Therapy and the Rehabilitation Process (3)
AHRS 200 - Disability in Society (3)
AHRS 327 - Introduction to Rehabilitation Services (3)
AHRS 492 - Medical Aspects of Disability in Rehabilitation (3)
AHRS 493 - Counseling in Rehabilitation Services (3)
One of the following courses:
AHRS 472 - Occupational Therapy and the Rehabilitation Process (3)
COMD 323 - Anatomy and Physiology of the Speech and Hearing Mechanisms (3)
COMD 425 - Neuropathologies of Speech and Language (3)

Requirements outside School (62 - 65)

BIOS 208 - Fundamentals of Biology I (3)
BIOS 209 - Fundamentals of Biology II (3)
BIOS 210 - Fundamentals of Biology I Laboratory (1)
BIOS 211 - Fundamentals of Biology II Laboratory (1)

BIOS 357 - Human Anatomy and Physiology (5),
 OR BIOS 311 - Functional Human Anatomy (4)
 BIOS 355 - Human Physiology (4)
 *CHEM 210 - General Chemistry I (3)
 *CHEM 211 - General Chemistry II (3)
 *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 213 - General Chemistry Laboratory II (1)
 *FCNS 201 - Human Nutrition (3)
 *MATH 155 - Trigonometry and Elementary Functions (3),
 OR *MATH 229 - Calculus (4)
 *PHHE 206 - Contemporary Health Concepts (3)
 *PHHE 295 - Introduction to Public Health (3)
 *PHYS 210 - General Physics I (4)
 *PHYS 211 - General Physics II (4)
 *PSYC 102 - Introduction to Psychology (3)
 *PSYC 225 - Lifespan Development: Childhood through Adulthood (3),
 OR *FCNS 280 - Human Development, the Family and Society (3)
 PSYC 316 - Introduction to Psychopathology (3)
 *STAT 208 - Basic Statistics (3),
 OR STAT 301 - Elementary Statistics (4)
 UHHS 310 - Introduction to Health and Human Sciences (3)
 UHHS 460 - Introduction to Research in Health and Human
 Sciences (3)

Total Hours for Emphasis 1. Pre-Physical Therapy: (83-86)

Emphasis 2: Rehabilitation Services

Students in this emphasis are usually preparing as paraprofessionals or professionals providing human/social services to persons with disabilities. The required courses provide a basic background in disability and rehabilitation concepts, psychological principles and statistics. 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 School (31)

AHCD 318 - Medical Terminology (3)
 AHRs 101 - American Sign Language I (3)
 AHRs 200 - Disability in Society (3)
 AHRs 327 - Introduction to Rehabilitation Services (3)
 AHRs 426 - Introduction to Topics in Rehabilitation Services (1)
 AHRs 482 - Post-Employment Services in Vocational
 Rehabilitation (3)
 AHRs 492 - Medical Aspects of Disability in Rehabilitation (3)
 AHRs 493 - Counseling in Rehabilitation Services (3)
 COMD 220 - Introduction to Communicative Disorders (3)
 COMD 305 - Language Development (3)
 One of the following courses:
 AHRs 472 - Occupational Therapy and the Rehabilitation
 Process (3)
 COMD 323 - Anatomy and Physiology of the Speech and
 Hearing Mechanisms (3)
 COMD 330 - Neuroscience of Communication and Associated
 Behaviors (3)

Requirements outside School (42-43)

ENGL 207 - Fundamentals or English Grammar (3)
 *PSYC 102 - Introduction to Psychology (3)
 *PSYC 225 - Lifespan Development: Childhood Through
 Adulthood (3),
 OR *FCNS 280 - Human Development, the Family and Society (3)
 PSYC 316 - Introduction to Psychopathology (3)
 *STAT 208 - Basic Statistics (3),
 OR STAT 301 - Elementary Statistics (4)
 UHHS 460 - Introduction to Research in Health and Human
 Sciences (3)
 Course work chosen with adviser's approval (24) at least 9 credits
 at the 300-400 level

Note: Students considering Occupational Therapy graduate training are encouraged to enroll in BIOS 311 and BIOS 357

Total Hours for Rehabilitation Services: (73-74)

Minor in Communicative Disorders (21)

Health Sciences and Medical Laboratory Sciences majors are eligible to complete this minor.

COMD 220 - Introduction to Communicative Disorders (3)

Electives in communicative disorders and/or rehabilitation services chosen from the following: (18)

AHCD 494 - Workshop in Allied Health and Communicative Disorders (1-3)

AHRs 493 - Counseling in Rehabilitation Services (3)

COMD 221 - Phonetics and Phonology (3)

COMD 300 - Introduction to Audiology (3)

COMD 305 - Language Development (3)

COMD 325 - Introduction to Hearing and Speech Science (4)

COMD 330 - Neuroscience of Communication and Associated Behaviors (3)

COMD 429 - Assessment Procedures in Communicative Disorders (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Deafness Rehabilitation (18)

Health Sciences Emphasis 1 and Emphasis 2, Medical Laboratory Sciences, and COMD majors are eligible to complete this minor.

Requirements (18)

AHRs 101 - Elementary American Sign Language I (3)

AHRs 102 - Elementary American Sign Language II (3)

AHRs 200 - Disability in Society (3)

AHRs 201 - Intermediate American Sign Language III (3)

AHRs 202 - Intermediate American Sign Language IV (3)

AHRs 327 - Introduction to Rehabilitation Services (3)

Course List

Allied Health and Communicative Disorders (AHCD)

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.

440. INTRODUCTION TO TEACHING IN THE ALLIED HEALTH PROFESSION (1). 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.

444. INDEPENDENT STUDY IN HEALTH SCIENCES (1-6). Independent study of current topics in the health sciences under faculty supervision. May be repeated or taken concurrently to a maximum of 6 semester hours. PRQ: Consent of school.

480. INTERNSHIP: ALLIED HEALTH AND COMMUNICATIVE DISORDERS (3). Supervised internship in health and human services to include agency/facility visits, discussion and observation of service provision, and entry-level experiences. PRQ: Junior or senior standing and consent of school.

490. SENIOR SEMINAR (3). Introduction to research topics in allied health and 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 school.

494. WORKSHOP IN ALLIED HEALTH AND COMMUNICATIVE DISORDERS (1-3). Application of principles of allied health and communicative disorders to problems of special interest to the participant. May be repeated to a maximum of 6 semester hours. Available for concurrent enrollment. S/U grading may be used.

498. TUTORIAL IN ALLIED HEALTH AND COMMUNICATIVE DISORDERS (1-3). Directed individual study and research in special areas of allied health and communicative disorders. Speech Language Pathology/Audiology, Clinical Laboratory Sciences, and Pre-physical Therapy majors may repeat to a maximum of 6 semester hours. Rehabilitation Services majors and Deafness Rehabilitation minors may repeat to a maximum of 9 semester hours with adviser approval. Available for concurrent enrollment. S/U grading may be used. PRQ: Consent of school.

499. HONORS CAPSTONE PROJECT (3). Intensive study of a selected topic in allied health or communicative disorders disciplines involving experimental or other scholarly work that serves as the capstone project in the University Honors Program. Open only to seniors within the School of Allied Health and Communicative Disorders who are currently admitted to the University Honors Program. PRQ: Consent of school and of the University Honors Program.

Medical Laboratory Sciences (AHLS)

211. INTRODUCTION TO THE MEDICAL LABORATORY SCIENCES (3). Introduction to the profession of medical laboratory sciences and to the medical 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.

300. URINALYSIS (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.

301. IMMUNOLOGY (2). Theory and application of general immunology, genetics principles and investigative techniques to clinical immunology as would be applied in the clinical laboratory.

302. HEMATOLOGY/HEMOSTASIS (3). Principles and investigative techniques of hematology and hemostasis. Examination of the chemical, biological, and technical basis for clinical laboratory procedures and quality assurance strategies. Development of proficiency in hematologic and coagulation procedures data interpretation.

303. IMMUNOHEMATOLOGY (2). Theory and application of genetics principles and investigative techniques to clinical immunohematology as it would be applied in the clinical laboratory. CRQ: AHLS 301.

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.

311. IMMUNOLOGY LABORATORY (1). Practical laboratory application of theory and analytical techniques related to the clinical immunology lectures. Includes manual and automated procedures for assessment of clinical specimens. Clinical specimens utilized in laboratory. CRQ AHLS 301.

312. HEMATOLOGY/HEMOSTASIS LABORATORY (2). Practical laboratory application of theory and analytical techniques related to the hematology and hemostasis lectures. Manual and automated procedures for assessment of hematology and hemostasis will be performed. Clinical specimens utilized in laboratory. CRQ: AHLS 302

313. IMMUNOHEMATOLOGY LAB (1). Practical laboratory application of theory and analytical techniques related to the immunohematology lectures. Includes manual and automated procedures for assessment of clinical specimens. Clinical specimens utilized in laboratory. CRQ: AHLS 303.

336. MEDICAL DIAGNOSTIC MICROBIOLOGY/MYCOLOGY/ PARASITOLOGY (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. Theory and application of general principles and laboratory techniques for the identification of pathogenic fungi and parasites in the clinical laboratory. PRQ: BIOS 213 or BIOS 313.

337. MEDICAL DIAGNOSTIC MICROBIOLOGY/MYCOLOGY/AND PARASITOLOGY LABORATORY (2). Practical laboratory application of theory and analytical techniques related to the clinical microbiology, mycology and parasitology lectures. Includes manual procedures for the identification and assessment of pathogenic microorganisms including fungi and parasites in the clinical laboratory. Clinical specimens utilized in laboratory. CRQ: AHLS 336.

344. MEDICAL DIAGNOSTIC BIOCHEMISTRY (3). Clinical correlations of laboratory results and pathologic processes. Theory of analytical techniques and interpretation of data as applied to clinical conditions.

345. MEDICAL 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.

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.

448. INTRODUCTION TO RESEARCH IN MEDICAL LABORATORY SCIENCES (3). Research in medical/clinical settings. Focus on design and critique of scientific articles and research projects.

470. TOPICS IN APPLIED MEDICAL LABORATORY SCIENCES.

A. Clinical Hematology/Hemostasis (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)

Lecture and laboratory experiences to be directed by medical laboratory sciences program officials. PRQ: Acceptance into the clinical laboratory sciences major.

471. MOLECULAR TESTING AND ADVANCED LECTURES (3). Advanced lectures and practical assessment in medical laboratory sciences including molecular testing by faculty and invited guest speakers with expertise in specialty topics. Course may be repeated for up to 6 semester hours. PRQ: Grades of C or better in all AHLS 300-level courses, or consent of school.

472. DIAGNOSTIC MOLECULAR BIOLOGY (2). Theory and application of nucleic acid testing used in forensics and diagnosis of infectious disease, inherited disorders, cancer, transplantation, mutations and polymorphisms. PRQ: Acceptance into the medical laboratory sciences major.

475. MEDICAL LABORATORY SCIENCES COMPETENCY (1). Application of all previously learned skills in the clinical laboratory and academic setting. Topics include hematology/hemostasis, microbiology/mycology/parasitology, chemistry, immunology, immunohematology, urinalysis/body fluids. S/U grading. PRQ: Consent of school.

480. TOPICS IN APPLIED NUCLEAR MEDICINE TECHNOLOGY (1-9).

A. Nuclear Medicine Technology Procedures. Principles of asepsis; patient handling and positioning; concepts of pathology and examination indications; diagnostic imaging and nonimaging 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 nonimaging 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; pharmacokinetics, 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.

Communicative Disorders (COMD)

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.

300. INTRODUCTION TO AUDIOLOGY (3). Introduction to the profession of audiology and clinical procedures; etiology and diagnosis of auditory disorders.

305 LANGUAGE DEVELOPMENT (3). *Crosslisted as LTLA 305X.* Overview of oral language acquisition including phonological, morphological, syntactic, semantic, and pragmatic development in children from infancy through adolescence. CRQ: ENGL 207.

323. ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISMS (3). 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.

325. INTRODUCTION TO HEARING AND SPEECH SCIENCE (4). Physical acoustics, the normal auditory process, and psychophysical processes relevant to audition as well as perceptual, physiological, and acoustical analysis of speech. PRQ: BIOS 109 or BIOS 357; and PHYS 150 or PHYS 180 or PHYS 210; and COMD 221. CRQ: COMD 323.

330. NEUROSCIENCE OF COMMUNICATION AND ASSOCIATED BEHAVIORS (3). Overview of the neuroanatomy and neurophysiology underlying communication and associated behaviors including sensory organization (auditory, visual, somatosensory), neuromotor control and higher-level language and cognitive mechanisms. Discussion of clinical syndromes associated with central and peripheral nervous system dysfunction. Note: Previous coursework in an anatomy class is strongly recommended. PRQ: At least sophomore standing.

421. AURAL REHABILITATION (3). 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 and COMD 300 and COMD 305.

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 305.

424. STUTTERING AND VOICE DISORDERS (3). Introduction to the identification, measurement, and treatment of stuttering and voice disorders. Course will provide an overview of these disorders including a focus on diagnosis and suggestions for treatment.

429. ASSESSMENT PROCEDURES IN COMMUNICATIVE DISORDERS (3). Fundamental concepts underlying the evaluation of communicative disorders. PRQ: COMD 220 and STAT 208 or STAT 301. CRQ: Junior status.

435. CLINICAL PROCEDURES AND PROFESSIONAL ISSUES (3). Presents general information concerning intervention principles and professional issues in communication disorders; including scopes of practice, clinical terminology, evaluation tools, construction of therapy plans, and report writing. PRQ: At least senior standing COMD major.

Physical Therapy (AHPT)

405. PHYSICAL THERAPY AND THE REHABILITATION PROCESS (3). Examination of the history, philosophy, practice settings and professional roles, ethical and legal issues, and current issues of physical therapy and rehabilitation. Supervised clinical observations at selected clinical sites. PRQ: Health sciences major and senior standing, or consent of school.

Rehabilitation Services (AHRS)

101. ELEMENTARY 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.

102. ELEMENTARY AMERICAN SIGN LANGUAGE II (3). Continuation of AHRS 101 emphasizing the improvement of communicative skills. Three hours of lecture and one hour of laboratory. PRQ: AHRS 101 or consent of school.

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.

201. INTERMEDIATE AMERICAN SIGN LANGUAGE III (3). Continuation of AHRS 102, with emphasis on developing fluency in American Sign Language. Three hours of lecture and one hour of laboratory. PRQ: AHRS 102 or consent of school.

202. INTERMEDIATE AMERICAN SIGN LANGUAGE IV (3). Continuation of AHRS 201, with emphasis on comprehension and production of increasingly complex linguistic structures. Emphasis on the development of fluent conversational skills utilizing grammatical nonmanual signals and markers. Students will learn how to narrate, describe, compare, and comment. Taught in ASL (i.e., without voice). Will include expanded discussion of Deaf Culture and its contribution to the arts. Three hours of lecture and one hour of laboratory. PRQ: AHRS 201 or consent of school.

327. INTRODUCTION TO REHABILITATION SERVICES (3). Survey of various fields and professions providing rehabilitation and related services to persons with disabilities.

426. INTRODUCTION TO TOPICS IN REHABILITATION SERVICES (1). Introduction and discussion of topics related to clinical procedures employed in provision of rehabilitation and related service to persons with disabilities. PRQ: Consent of school.

472. OCCUPATIONAL THERAPY AND THE REHABILITATION PROCESS (3). Introduction to the field of occupational therapy including history, philosophy, scope and areas of practice, ethics, training, credentialing and roles and responsibilities of occupational therapists, occupational therapy assistants, and occupational therapy aides. Special attention given to occupational therapy as part of an interdisciplinary team with disciplines including speech-language pathology, physical therapy and rehabilitation services. PRQ: Consent of school.

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.

492. MEDICAL ASPECTS OF DISABILITY IN REHABILITATION (3). A rehabilitative perspective on the structure of medicine in the United States, medical specialties, 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 REHABILITATION SERVICES (3). Counseling principles and techniques as related to assessment, treatment, parent conferences, staffings, and eliciting parent/client cooperation.

Allied Health and Communicative Disorders Faculty

Sherrill R. Morris, Ph.D., University of Kansas, associate professor, chair

Hamid Bateni, Ph.D., McGill University, associate professor

Mary Jo Blaschak, Ph.D., Northwestern University, associate professor

Daniel L. Boutin, Ph.D., Pennsylvania State University, associate professor

King Chung, Ph.D., Northwestern University, associate professor

Cristine F.C. Dos Santos, Ph.D., UNESP, assistant professor

Prisca Collins, Ph.D., University of Pittsburgh, assistant professor

Bryan K. Dallas, Ph.D., Southern Illinois University Carbondale, assistant professor

Danai C. F. Fannin, Ph.D., University of North Carolina, assistant professor

Deborah L. Gough, Ed.D., Northern Illinois University, professor emeritus

Jeanne M. Isabel, M.S.Ed., Northern Illinois University, associate professor

Gregory A. Long, Ph.D., University of Kansas, Presidential Teaching Professor

Jamie F. Mayer, Ph.D., Indiana University, assistant professor

Amanda K. McCarthy, Ed.D., Northern Illinois University, assistant professor

Raymundo Munguia Vazquez, Ph.D., McGill University, assistant professor

Christine Odeh, M.H.S., University of Indianapolis, instructor

Janet L. Olson, Ph.D., Northern Illinois University, assistant professor

Masih Shokrani, Ph.D., Meharry Medical College, associate professor

Patricia Tattersall, Ph.D., Western Michigan University, assistant professor

Miriam VanMersbergen, Ph.D., University of Minnesota, assistant professor

Matthew J. Wilson, Ph.D., University of Tennessee Health Science Center, assistant 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 licensure 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, FCNS 495, SEEC 485A, and SEEC 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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 201 - Human Nutrition (3),
 OR FCNS 207 - The Consumer (3),
 OR FCNS 285 - Introduction to Family Life Education (3),
 OR FCNS 405 - Child Health and Nutrition (3),
 OR PHHE 306 - Human Sexuality (3),
 FCNS 230 - Child Development (3)
 FCNS 280 - Human Development, the Family, and Society (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 180 - Personal Development and the Family (3)
 FCNS 398 - Cooperative Education for Family and Individual Development (3)
 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 482 - Child Abuse and Neglect (3)
 FCNS 483 - Social Policy, Children and Families (3)
 FCNS 486 - Aging and the Family (3)
 FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)

Requirements outside School (21-23)

One of the following (3)
 ENGL 350 - Writing Across the Curriculum (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)
 UHHS 350 - Critical Thinking for Health and Human Services Professionals (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

Special Requirements

Prior to enrolling in FCNS 398, the following must be completed:

- fingerprint-based criminal background check;
- completed application required to meet posted deadlines

Professional liability insurance is provided through a course fee.

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 (43)

- FCNS 180 - Personal Development and the Family (3)
- FCNS 201 - Human Nutrition (3),
 - OR FCNS 207 - The Consumer (3),
 - OR FCNS 285 - Introduction to Family Life Education (3),
 - OR FCNS 405 - Child Health and Nutrition (3),
 - OR PHHE 306 - Human Sexuality (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 Social Services (7)
- FCNS 445 - Management of Human and Family Resources (3)
- FCNS 481 - Professional Practices in Family Social Services (3)
- FCNS 484 - Family Theories (3)
- FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3),
 - OR FCNS 384 - Asian American Families (3),
 - OR SOCI 358 - Racial and Ethnic Minority Families (3)
- One of the following (3)
 - FCNS 438 - Parent Education (3)
 - FCNS 482 - Child Abuse and Neglect (3)
 - FCNS 483 - Social Policy, Children and Families (3)
 - FCNS 486 - Aging and the Family (3)
 - PSYC 316 - Introduction to Psychopathology (3)

Requirements outside the School (18-20)

- One of the following (3)
 - ENGL 350 - Writing Across the Curriculum (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)
 - UHHS 350 - Critical Thinking for Health and Human Services Professionals (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: 61-63**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.

Complete a total of 100 certified hours of approved community service, at least 50 hours completed prior to enrolling in FCNS 383 and the balance completed prior to enrolling in FCNS 431B. Prior to registering for FCNS 431B, NIU must have a signed affiliation agreement with the agency where the student will be serving their internship.

A grade of C or better in FCNS 180 is a prerequisite for enrolling 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, completion of FCNS 481, senior standing, and consent of the school. Professional liability insurance is provided through a course fee. Application is required in September for internships during the following spring and summer terms. In the semester prior to enrollment in FCNS 431B, students are required to attend monthly meetings. 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.

B.S. Completion in Emphasis 2

This completion program is limited to students with an Applied Associate of Science degree in human development and family studies from City Colleges of Chicago. Upon successful completion at NIU of at least 7 semester hours of FCNS 431B with a grade of C or better, the student will receive a total of 12 semester hours credit for: PHHE 306, FCNS 488, FCNS 431B and one 3 credit upper division elective. The required community service hours will be waived for students who have completed an Associates of Applied Science in Human Development and Family Studies from the City Colleges of Chicago. Graduates of other community colleges with similar programs can petition the School of Family, Consumer and Nutrition Sciences for a review of their transcripts.

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. With this preparation, graduates are qualified to apply for an Early Childhood Core Credential Level V, the Infant/Toddler Credential Level V, the Illinois Director Credential Level II, and an Early Intervention Developmental Therapist credential. Students can apply for the first three credentials by contacting the Illinois Network of Child Care and Resources Referral Agencies. Students can apply for the fourth credential by contacting Provider Connections. Students interested in the Illinois Director Credential must take: FCNS 434, FCNS 438, FCNS 445, and FCNS 483. The Child Development Emphasis is recommended as preparation for advanced degrees in child development, family and child studies, and related fields.

Requirements in School (51)

- 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 482 - Child Abuse and Neglect (3)
 FCNS 490 - Practicum in Infant and Child Development Laboratories (12)
 FCNS 498 - Professional Seminar in Family, Consumer, and Nutrition Sciences (3)

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 Quality Programs for Young Children from Diverse Backgrounds (3),
 OR FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (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)

FCNS 433 - Introduction to Child Life Theory and Practice (3)
 Two of the following (6)
 AHCD 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 483 - Social Policy, Children and Families (3),
 OR FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3),
 FCNS 434 - Administration and Supervision of Quality Programs for Young Children from Diverse Backgrounds (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)
 *PSYC 102 - Introduction to Psychology (3)
 *SOCI 170 - Introduction to Sociology (3)
 *STAT 208 - Basic Statistics (3)
 One of the following (3-4)
 ENGL 350 - Writing Across the Curriculum (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)
 UHHS 350 - Critical Thinking for Health and Human Services Professionals (3)

Total Hours of Emphasis 3, Child Development: 66-67

Special Requirements

Students must earn a grade of C or better in FCNS 230 or EPS 304 or PSYC 324 in order to enroll in FCNS 330, FCNS 331, and FCNS 332. Students are required to attend mandatory meetings every fall and spring semester prior to enrollment in FCNS 490.

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;
- completion of 50 hours of approved community service in a child development agency (completed after admission to program and prior to admission to FCNS 490);

completion of FCNS 230 and FCNS 330 with a grade of C or better, FCNS 331 and FCNS 332 with a grade of C or better, and FCNS 432 and FCNS 498;

meet DCFS licensing requirements for personnel, including:

- physical and mental competencies that do not interfere with child care responsibilities,
- verification of a nonreactive two step tuberculin skin test and physical exam within the last 6 months,
- fingerprint-based criminal background check,
- three letters of reference,
- certification in first aid and cardiac pulmonary resuscitation (CPR),
- and proof of Illinois Network of Childcare Resource and Referral Agencies' Gateway Registry,

and consent of the school.

Professional liability insurance is provided through a course fee.

Students must complete FCNS 490 with a grade of C or better. 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.

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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (30-34)

FCNS 152 - Fiber and Fabric Analysis I (3)
 FCNS 258 - Introduction to the Fashion Industry (3)
 FCNS 262 - Design Trends in Western Costume (3)
 FCNS 353 - Apparel Products Analysis (3)
 FCNS 355 - Merchandising Mathematics (3)
 FCNS 466 - Economics of Apparel and Textile Industries (3)
 FCNS 468 - Consumer Behavior Related to Apparel (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 272 - Merchandising Promotion (3)
 FCNS 369 - Fashion Design and Illustration (3)
 FCNS 450¹ - Workshop in Family, Consumer, and Nutrition Sciences (3)
 FCNS 456 - Apparel Product Development (3)
 FCNS 457 - Professional Development for Apparel Merchandising (3)
 FCNS 464 - Social Psychology of Dress and Appearance (3)
 FCNS 469 - Computer-Aided Fashion Design (3)
 FCNS 471 - Advanced Buying and Sourcing in the Fashion Industry (3)

* Available for general education credit

¹ When topic is related to textiles, apparel, and merchandising.

Requirements outside School (34-35)

ACCY 288 - Fundamentals of Accounting (3)
 ART 102 - 2-D Foundation (3),
 OR *ARTH 282 - Introduction to the World Art (3)
 *CHEM 110 - Chemistry (3)
 *CHEM 111 - Chemistry Laboratory (1)
 *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)
 MGMT 333 - Principles of Management (3)
 MKTG 310 - Principles of Marketing (3)
 *PSYC 102 - Introduction to Psychology (3)
 *SOCI 170 - Introduction to Sociology (3)
 *STAT 208 - Basic Statistics (3),
 OR UBUS 223 - 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: 64-69**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

B. S. in Textiles, Apparel and Merchandising Degree Completion Program

This program is designed to facilitate completion of the B. S. in Textiles, Apparel and Merchandising for individuals holding an AAS in Fashion Merchandising or related degree. To receive the B. S. degree, a student must satisfy all university graduation requirements and major requirements. Students in this program are exempt from the 30 semester hour university residence requirement.

Those interested in the B. S. degree completion program in Textiles, Apparel and Merchandising should contact a program adviser for a pre-admission advising meeting, where coursework to be completed at the AAS degree institution as well as at NIU will be confirmed. Contingent upon the curriculum of the individual AAS degree institution, students may receive proficiency credit for the following Textiles, Apparel and Merchandising major coursework: FCNS 152, FCNS 258, FCNS 262, FCNS 272.

Additional proficiency credit may be awarded as determined at the pre-admission advising session, to be posted upon completion of degree requirements. Students must complete 30 semester hours at NIU, excluding proficiency credit. In this completion program, students are exempt from the 30 semester hour residency requirement.

Comprehensive Major in Nutrition, Dietetics, and Hospitality Management (B.S.)

Majors in nutrition, dietetics, and hospitality management may prepare for positions in dietetics, in hospitality management, 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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, cardiac pulmonary resuscitation (CPR), and 2-step tuberculin (TB) test. 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 management major. Liability insurance for internships is provided through a course fee.

For Emphasis 2, Nutrition and Dietetics, major GPA will be calculated using Requirements in and outside of the school. Refer to all courses listed in Emphasis 2.

Emphasis 1. Hospitality Management

The mission of the Hospitality Management emphasis is to engage students to develop the foundational knowledge, demonstrated skills and professional attitudes required for contemporary and future practice or advanced study in the fields of hospitality. Majors in this emphasis engage in practical experiences such as operating a dining facility, observing hotel operations, and completing internships in the hospitality industry.

Requirements in School (48-52)

FCNS 200A - Principles of Food Preparation (3) and FCNS 200B Food Preparation Laboratory (2),
 OR FCNS 304 - Food and Beverage Operations (3)
 FCNS 202 - Introduction to the Hospitality Industry (3)
 FCNS 316 - Hospitality Service (3)
 FCNS 320 - Quantity Food Production (4)
 FCNS 418 - Managing Human Resources in the Hospitality Industry (3)
 FCNS 425 - Hospitality Management (3)
 FCNS 426 - Strategic Management in the Hospitality Industry (3)
 FCNS 491 - Leadership Seminar in Hospitality and Tourism (2)
 FCNS 492 - Distinguished Speaker Series (1)
 FCNS 495 - Internship in Hospitality Management (8)
 FCNS 498 - Professional Seminar in Family, Consumer, and Nutrition Sciences (1)

Select two of the following (5-6), or other appropriate courses, in consultation adviser:

FCNS 303 - Hospitality Law (3)
 FCNS 417 - Tradeshow and Exhibition management Management (3)
 FCNS 424 - Cultural and National Food Patterns (3)
 FCNS 427 - Catering Operation Practicum (2-3)
 MGMT 335 - Organizational Behavior (3)
 MKTG 325 - Buyer Behavior (3)
 MKTG 350 - Principles of Selling (3)
 Select one of the following areas of study.
 Hotel Management (9)
 FCNS 302 - Lodging Operation (3)
 FCNS 314 - Hospitality Facility Management (3)
 FCNS 411 - Yield Management in the Hospitality Industry (3)
 Restaurant, Meeting, and Event Management (9)
 FCNS 304 - Food and Beverage Operations (3)
 FCNS 413 - Meeting, Event, and Convention Management (3)
 FCNS 424 - Cultural and National Food Patterns (3)

Requirements outside School (27-32)

ACCY 206 - Introductory Financial Accounting (3),
 OR ACCY 288 - Fundamentals of Accounting (3)
 *CHEM 110¹ - Chemistry (3), and CHEM 111¹ - Chemistry Laboratory (1),
 OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)
 *ECON 260 - Principles of Microeconomics(3)

* Available for general education credit.

¹ Required only when taking FCNS 200A and FCNS 200B.

*MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Science (3)
 MGMT 217 - Legal Environment of Business (3)
 MGMT 333 - Principles of Management (3)
 MKTG 310 - Principles of Marketing (3)
 MKTG 425 - Services Marketing (3)
 *PSYC 102 - Introduction to Psychology (3)
 STAT 301 - Elementary Statistics (4),
 OR *STAT 208 - Basic Statistics (3),
 OR UBUS 223 - Introduction to Business Statistics (3)

Total Hours for Emphasis 1, Hospitality Management: 75-84

B. S. Degree Completion Program in Nutrition, Dietetics, and Hospitality Management with an emphasis in Hospitality Management

The focus of this program is baccalaureate-level education for Hospitality Management. This degree program is uniquely designed for individuals who have finished their A.A.S. (Associate in Applied Science) in Hospitality Management or related degree. The degree program is offered primarily online.

To receive the degree, a student must satisfy all university graduation requirements and must have completed an applied associate degree.

Students interested in the B.S. degree completion program in Nutrition, Dietetics, and Hospitality Management with an emphasis in Hospitality Management should contact a program adviser for a pre-admission interview and course counseling session. Upon completion of the pre-admission interview and admission to NIU, proficiency credit may be awarded for FCNS 202, FCNS 302, FCNS 316, and FCNS 320.

Additional proficiency credit may be awarded as determined at the pre-admission advising session, to be posted upon completion of degree requirements. Students must complete 30 semester hours at NIU, excluding proficiency credit. In this completion program, students are exempt from the 30 semester hour residency requirement.

Emphasis 2. Nutrition, Health, and Wellness

This emphasis provides basic preparation for fulfillment of the baccalaureate requirements for careers in community nutrition programs, wellness, 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 Academy of Nutrition and Dietetics (the Academy). The program is accredited by the Accreditation Council for Education of Nutrition and Dietetics (ACEND). Students seeking verification of DPD completion must maintain a grade point average (GPA) of at least 3.00 in DPD program courses (see adviser). In addition these students must achieve a grade of B or better in both of the following DPD courses: FCNS 310 and FCNS 415. Students are also strongly recommended to acquire work experience in patient care and food service.

To become a registered dietitian (R.D.), a student with DPD verification of academic requirements must complete an ACEND accredited supervised practice experience and pass the national registry examination.

Postbaccalaureate students

Postbaccalaureate students without degrees from an ACEND accredited nutrition degree program who request DPD verification by NIU must consult with the DPD director prior to NIU enrollment to determine required course work. Additional course work may be required to earn a second baccalaureate degree. Students should consult with an academic adviser.

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 through the Lifecycle (3)
 FCNS 320 - Quantity Food Production (4)
 FCNS 409 - Nutrition Education for Health Promotion (3)
 FCNS 410 - Community Nutrition (3)
 FCNS 415 - Medical Nutrition Therapy I (3)
 FCNS 420 - Foodservice Management (3)
 FCNS 498 - Professional Seminar in Family, Consumer, and Nutrition Sciences (1)
 One of the following (3)
 FCNS 306 - Nutrition in Relation to Health and Exercise (3)
 FCNS 316 - Hospitality Service (3)
 FCNS 416¹ - Medical Nutrition Therapy II (3)
 FCNS 427 - Catering Operations Practicum (3)

Requirements outside School (43-45)

*BIOS 103 - General Biology (3)
 BIOS 105 - General Biology Laboratory (1)
 BIOS 213 - Introductory Bacteriology (3),
 OR BIOS 313 - Microbiology (4)
 BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 110 - Chemistry (3),
 OR *CHEM 210 - General Chemistry I (3)
 *CHEM 111 - Chemistry Laboratory (1),
 OR *CHEM 212 - General Chemistry Laboratory I (1)
 CHEM 230 - Introductory Organic Chemistry (3),
 OR CHEM 330 - General Organic Chemistry I (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 208 - Basic Statistics (3),
 OR STAT 301 - Elementary Statistics (4)

Total Hours for Emphasis 2, Nutrition, Health and Wellness: 74-76

Educator Licensure Family and Consumer Sciences

Students with a major in the School of Family, Consumer, and Nutrition Sciences who want to be licensed to teach family and consumer sciences in middle/junior high and high school must:

plan their programs of study in consultation with an educator licensure adviser in the school at the earliest possible date. Early selection of appropriate general education courses will eliminate course duplication. See "Educator Licensure Requirements."

obtain consent of family and consumer sciences educator licensure adviser for enrollment in early field experiences.

obtain school approval for admission into the educator licensure program. School approval for admission to the educator licensure program requires admission to the major or a degree in family and consumer sciences from an accredited institution; passing the Test of Academic Proficiency in the Illinois Licensure Testing System (ILTS); and a cumulative GPA of at least 2.75 in all NIU course work and 3.00 in FCNS course work with a minimum grade of C or better in each course used to fulfill the requirements of the Family and Consumer Sciences Educator Licensure program. Admission to a degree program does not guarantee admission to the licensure program.

* Available for general education credit.

¹ Required for DPD verification.

obtain the Illinois State Sanitation Certificate prior to FCNS 200A.

obtain school approval for admission into student teaching which requires passing the family and consumer sciences content test in the Illinois Licensure Testing System.

maintain a minimum 2.75 GPA in all NIU course work with a 3.00 GPA in FCNS 344 and FCNS 345 for retention with a minimum grade of C or better in each course used to fulfill the requirements of the Family and Consumer Sciences Educator Licensure program.

Discipline course work must be approved by the school's educator licensure adviser.

Upon admission to the Family and Consumer Sciences Educator Licensure program, student coursework related to licensure must have been taken no more than 5 years prior to admission to the licensure program. Once admitted, students must continue to make satisfactory progress toward licensure.

Professional liability insurance for field experience and student teaching is paid through course fees.

Requirements in School (61-65)

FCNS 152 - Fiber and Fabric Analysis I (3),
OR FCNS 258 - Introduction to the Fashion Industry (3)
FCNS 200A - Principles of Food Preparation (3)
FCNS 200B - Food Preparation Laboratory (2)
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 483 - Social Policy, Children and Families (3)
FCNS 484 - Family Theories (3)
FCNS 489 - Topical Issues in Family and Child Studies (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 Quality Programs for Young Children from Diverse Backgrounds (3)
FCNS 437 - Parent-Child Interaction From Birth to 8 Years (3)
FCNS 482 - Child Abuse and Neglect (3)
FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (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 (3-6)

Apparel and Textiles (6)

FCNS 152 - Fiber and Fabric Analysis I (3),
OR FCNS 258 - Introduction to the Fashion Industry (3),
OR FCNS 262 - Design Trends in Western Costume (3)
FCNS 353 - Apparel Products Analysis (3)

Living Environments (6)

Courses taken with approval of program adviser.

Nutrition, Wellness, and Hospitality (3)

FCNS 202 - Introduction to the Hospitality Industry (3),
OR FCNS 308 - Current Problems and Trends in Nutrition and Foods (3),
OR FCNS 406 - Global Food and Nutrition Issues (3),
OR FCNS 424 - Cultural and National Food Patterns (3),

Requirements outside School (31-34)

*BIOS 103 - General Biology (3),
OR *BIOS 106 - Environmental Biology (3),
OR *BIOS 109 - Human Biology (3)
*CHEM 110 - Chemistry (3)
*CHEM 111 - Chemistry Laboratory (1)
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 proficiency exam
ETT 402 - Teaching and Learning with Technology (3)
LTIC 301 - Teaching with a Multicultural Perspective (3)
LTRE 310 - Teaching Reading in the Secondary School (3)
PSYC 102 - Introduction to Psychology (3)
SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

Additional course work required for licensure depends on major selected.

Interdisciplinary Major in Early Childhood Studies (B.S.)

The School of Family, Consumer, and Nutrition Sciences and the Department of Special and Early Education 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 Educator Licensure enabling them to teach children from birth through grade three in Illinois public schools. Students in the 04 licensure 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 2.50.

Students should carefully read the section entitled "Educator Licensure Requirements."

As part of educator licensure, students will need to pass Illinois Licensure Testing System (ILTS) examinations, including a passing score on the Test of Academic Proficiency or a minimum score on the ACT of 22 with the writing portion taken concurrently 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.

* Available for general education credit.

¹ Not required for students who have earned an A.A.T. in Early Childhood.

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 Special and Early Education.

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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis in 04 Licensure

Students who successfully complete the emphasis will have completed all required ISBE and CAEP standards for licensure.

Core Requirements (61-65)

COMD 305/LTLA 305X - Language Development (3)
 *EPFE 201¹ - Education as an Agent for Change (3)
 ETT 229¹ - Computers in Education (3),
 OR pass the ETRA Skills Competency Examination (0)
 FCNS 230¹ - Child Development (3)
 FCNS 284¹ - Introduction to Family Relationships (3)
 FCNS 331 - Inclusive Program Planning for Infants, Toddlers, and Their Parents (3)
 *HIST 260¹ - American History to 1865 (3),
 OR *HIST 261¹ - American History Since 1865 (3)
 LTRE 309 - Emerging Literacy and Beginning Reading Instruction Through Age 8 (3)
 *MATH 201¹ - Foundations of Elementary School Mathematics (3)
 PHIL 231¹ - Contemporary Moral Issues (3)
 *PSYC 102¹ - Introduction to Psychology (3)
 SEEC 282 - Educational Participation in Clinical Experiences: Early Childhood Education (1-2)
 SEEC 340 - The Language Arts and Social Studies for the Primary Child (3)
 SEEC 343 - Teaching Science and Mathematics to Children Ages 5-8 (3)
 SEEC 382 - Practicum in Early Childhood Studies (3)
 SEEC 403 - Primary Curriculum (3)
 SEEC 430 - Preschool and Kindergarten Curriculum (3)
 SEEC 485A - Student Teaching in Preschool-Kindergarten (6)
 SEEC 485B - Student Teaching in Primary (6)
 SEEC 240¹ - 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 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)

Requirements outside School (9-10)

*BIOS 103¹ - General Biology (3),
 OR *BIOS 109¹ - Human Biology (3)
 *POLS 100¹ - American Government and Politics (3),
 OR *POLS 150¹ - Democracy in America (3)
 STAT 208¹ - Basic Statistics (3)

Total hours for Emphasis in 04 Licensure: 92-96

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 (18)

*BIOS 103 - General Biology (3),
 OR *BIOS 109 - Human Biology (3)
 *FCNS 201 - Human Nutrition (3),
 OR FCNS 405 - Child Health and Nutrition (3)
 *FCNS 207 - The Consumer (3)
 FCNS 258 - Introduction to the Fashion Industry (3)
 *FCNS 280 - Human Development, the Family, and Society (3)
 *PSYC 102 - Introduction to Psychology (3)

Minor in Family and Child Studies (21)

*FCNS 230 - Child Development (3),
 *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 482 - Child Abuse and Neglect (3)
 FCNS 483 - Social Policy, Children and Families (3)
 FCNS 486 - Aging and the Family (3)
 FCNS 488 - Working with Ethnically Diverse Children and Families in the U.S. (3)
 FCNS 489 - Topical Issues in Family and Child Studies (3)

Minor in Nutrition, Dietetics, and Hospitality Management (21-23)

FCNS 200A - Principles of Food Preparation (3)
 *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)
 *BIOS 103 - General Biology (3),
 OR *BIOS 109 - Human Biology (3),
 OR BIOS 311 - Functional Human Anatomy (4),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1),
 OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)

And three of the following, including at least one upper-division course. (8-9)

FCNS 200B - Food Preparation Laboratory (2)
 FCNS 202 - Introduction to the Hospitality Industry (3)
 FCNS 302 - Lodging Operations (3)
 FCNS 308 - Current Problems and Trends in Nutrition and Foods (3)
 FCNS 316 - Hospitality Service (3)
 FCNS 405 - Child Health and Nutrition (3)
 FCNS 406 - Global Food and Nutrition Issues (3)
 FCNS 424 - Cultural and National Food Patterns (3)

¹ Available for general education credit

¹ Not required for students who have earned an A.A.T. in Early Childhood.

Minor in Textiles, Apparel, and Merchandising (19)

ART 102 - 2-D Foundation (3),
 OR *ARTH 282 - Introduction to World Art (3)
 *CHEM 110 - Chemistry (3)
 *CHEM 111 - Chemistry Laboratory (1)
 FCNS 152 - Fiber and Fabric Analysis I (3)
 FCNS 258 - Introduction to the Fashion Industry (3)
 FCNS 353 - Apparel Products Analysis (3)
 One additional course is required from the upper-level courses in
 textiles, apparel, and merchandising (3)

Certificates of Undergraduate Study**Illinois Director Credential Certificate – Level 2 (15)**

This certificate is designed to meet the standards for the Illinois Director Credential (IDC) (Level 2) of the Illinois Network of Child Care Resource & Referral Agencies (INCCRRA). The Illinois Director's Credential is recognized by the National Association for the Education of Young Children's (NAEYC) leadership criteria for NAEYC Accreditation and by the Program Administration Scale used to assess for the highest star rating in the state Quality Rating System for child care centers. Upon successful completion of this certificate, students will be eligible to apply for the IDC from INCCRRA.

Applicants for the IDC certificate must hold a bachelor's degree in a child-related major and must meet INCCRRA Early Childhood Education (ECE) credential requirements for Level 5. To earn the certificate, students must maintain a good academic standing in the university, achieve a minimum grade of C in each certificate course, achieve a GPA of 2.50 in all certificate courses, and complete all certificate course work within five academic years.

Core Courses (15)

FCNS 431A - Internship: Child Development (3)
 FCNS 434 - Administration and Supervision of Quality Programs for
 Young Children from Diverse Backgrounds (3)
 FCNS 438 - Parent Education (3)
 FCNS 445 - Management of Human and Family Resources (3)
 FCNS 483 - Social Policy, Children and Families (3)

Infant Toddler Credential Certificate – Level 5 (12)

This certificate is designed to meet the standards for the Infant Toddler Credential (ITC) (Level 5) of the Illinois Network of Child Care Resource & Referral Agencies (INCCRRA). The Infant Toddler Credential is recognized by the National Association for the Education of Young Children's (NAEYC) teachers' criteria for NAEYC Accreditation and by the Program Administration Scale used to assess for the highest star rating in the state Quality Rating System for child care centers. Upon successful completion of this certificate, students will be eligible to apply for the ITC from INCCRRA.

Applicants for the ITC certificate must hold a bachelor's degree in a child-related major and must meet INCCRRA Early Childhood Education (ECE) credential requirements for Level 5. To earn the certificate, students must maintain a good academic standing in the university, achieve a minimum grade of C in each certificate course, achieve a GPA of 2.50 in all certificate courses, and complete all certificate course work within five academic years.

Core Courses (12)

FCNS 331 - Inclusive Program Planning for Infants, Toddlers and
 Their Parents (3)
 FCNS 356A - Cooperative Education II: 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)

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 (1-3).

A. Child Development
 B. Family Social 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.

356. COOPERATIVE EDUCATION II (1-3).

A. Child Development
 B. Family Social 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 for A-D: FCNS 256 or equivalent, declared major, and consent of school. PRQ for E: FCNS 152 with a grade of C or better and FCNS 258 with a grade of C or better, an overall GPA of 2.00 or above, declared major.

431. INTERNSHIP (1-15).

A. Child Development
 B. Family Social Services
 D. Family and Consumer Sciences Education
 E. Nutrition and Dietetics

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. See special requirements as may apply to internships according to major.

450. WORKSHOP IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1-3). 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. See special requirements as may apply to internships according to major. PRQ: At least junior standing.

460. PROBLEMS IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1-3). Work in individual problems in the student's special area. Requires approval of a supervising faculty member and school. May be repeated to a maximum of 6 semester hours. PRQ: Junior or senior standing.

498. PROFESSIONAL SEMINAR IN FAMILY, CONSUMER, AND NUTRITION SCIENCES (1-3). 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 Management

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, or CHEM 210 and CHEM 212; and current State of Illinois Sanitation Certificate.

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 109, BIOS 208, 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.

299. EXPERIENCES IN HOSPITALITY MANAGEMENT I (3-30). Approved introductory experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FCNS 399, Experiences in Hospitality Management II, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

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.

303. HOSPITALITY LAW (3). Introduction to the principles of hotel, restaurant, and travel law. Case studies of industry related regulations on duty of innkeepers, dram shop laws, truth in menu laws, and service contracts in the hospitality industry. PRQ: MGMT 217 and FCNS 202. CRQ: FCNS 302.

304. FOOD AND BEVERAGE OPERATIONS (3). Principles of food and beverage operations. Application of established standards, techniques, and practices of food and beverage management including styles of dining room services, menu design, purchasing, storing, and controlling restaurant supplies and equipment, legal issues on serving alcoholic beverages, food sanitation, revenue and cost control, restaurant facility design, customer service, and labor management. PRQ: FCNS 202.

306. NUTRITION IN RELATION TO HEALTH AND EXERCISE (2-3). Essentials of normal nutrition with application to exercise and individualized sports nutrition plans. PRQ: BIOS 311 or BIOS 357 and one course in chemistry. If taken for 2 semester hours, CRQ: KNPE 306.

308. 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: At least junior standing.

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. Offered fall semester only. PRQ: BIOS 103 and BIOS 105, CHEM 230 or CHEM 330. CRQ: BIOS 357.

310. APPLIED NUTRITION THROUGH THE LIFECYCLE (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.

314. HOSPITALITY FACILITY MANAGEMENT (3). An overview of the operation of hospitality facilities, including operating costs for various types of facilities, types and characteristics of major building systems, renovation and design issues specifically related to the hospitality industry. Environmentally sustainable hotel management is discussed with a broad range of topics including global certifications. PRQ: FCNS 302. CRQ: MGMT 333.

316. HOSPITALITY SERVICE (3). Principles and practices of service excellence within the hospitality industry. Presents an overview of service management in the hospitality industry including design, evaluation, and management of hospitality service delivery systems. PRQ: FCNS 202 and hospitality management major.

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 with a grade of C or better and FCNS 200B with a grade of C or better, or FCNS 304 with a grade of C or better, and current State of Illinois Sanitation Certificate, certifications in first aid and cardiac pulmonary resuscitation (CPR), 2-step tuberculin (TB) test, and verification of 100 hours work experience in food production.

399. EXPERIENCES IN HOSPITALITY MANAGEMENT II (3-30). Approved advanced experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FCNS 299, Experiences in Hospitality Management I, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

405. CHILD HEALTH AND NUTRITION (3). Application of the principles of health and nutrition to meet the physiological, sociological, 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 management. PRQ: FCNS 230 or FCNS 280 or EPS 304 or PSYC 225 or PSYC 324.

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 or BIOS 109; and ANTH 120 or SOCI 170 or equivalent.

409. NUTRITION EDUCATION FOR HEALTH PROMOTION (3). Development of strategies for nutrition education. Emphasis on health promotion theory and guidelines to optimize nutrition-related behaviors. Participation in activities that address health promotion/disease prevention for the general population. PRQ: FCNS 310 with a grade of C or better.

410. COMMUNITY NUTRITION (3). Examination of nutrition needs of populations, intervention services, and public policy issues for community-based nutrition programs. Planning, implementing, and evaluating community nutrition programs. Includes field experiences and hands-on learning. PRQ: FCNS 409 with a grade of C or better.

411. YIELD MANAGEMENT IN THE HOSPITALITY INDUSTRY (3). Exploration of competitive benchmarking, demand forecasting and distribution using case analysis, internal and external measurement tools, tactical pricing and packaging in the hospitality operation. Topics include demand forecasting in hospitality operation, channel and hotel room inventory management, and yield management software application. PRQ: FCNS 302 and ECON 260.

413. MEETING, EVENT, AND CONVENTION MANAGEMENT (3). Fundamental concepts of meeting, event, and convention management. Includes the foundation and structure of the meeting industry, site selection, facility contractual issues, meeting budget management, industry associations, Convention and Visitors Bureaus, meeting destinations, sponsors, meeting technology, convention and conference centers, and catering management. Career exploration is also discussed. PRQ: FCNS 202 with a grade of C or better.

415. MEDICAL NUTRITION THERAPY 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. Offered fall semester only. PRQ: FCNS 310 with a grade of C or better, and CHEM 370.

416. MEDICAL NUTRITION THERAPY 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. This course is required for the Didactic Program in Dietetics Verification. Offered spring semester only. PRQ: FCNS 415 with a grade of C or better.

417. TRADE SHOW AND EXHIBITION MANAGEMENT (3). Study of tradeshow and exhibition management. Includes varieties of exhibitions, trade show planning, on-site operations, and design of exhibitor prospectus, marketing materials, floor plans, legal considerations, registration and data management, specification and work orders, service contractors, housing management, and international exhibitions. PRQ: FCNS 413 with a grade of C or better and at least junior standing.

418. MANAGING HUMAN RESOURCES IN THE HOSPITALITY INDUSTRY (3). Fundamental concepts, techniques, and tools of human resources management in the hospitality industry. Includes legislative and technical aspects of managing hospitality employees, roles and responsibilities of hospitality managers in employee selection, performance appraisals, training, compensation, and benefits. Global issues and other current topics in hospitality human resource management are covered. PRQ: FCNS 202 with a grade of C or better and MGMT 333.

420. MANAGEMENT OF FOOD AND NUTRITION SERVICES (3). Principles of food and nutrition services management with emphasis on personnel management, cost controls, marketing, and menu analysis. PRQ: MGMT 333 and 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 MANAGEMENT (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 206 or ACCY 288, and MATH 110 or satisfactory performance on the mathematics placement examination.

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. Attention is given to specific strategies for building competitive advantage and generating superior value for customers in the hospitality industry. PRQ: FCNS 425 with a grade of C or better, and MGMT 333.

427. CATERING OPERATIONS PRACTICUM (2-3). Study and application of catering functions and services. Plan, organize, implement and execute catering activities at the Chandelier Dining Room and other locations. Laboratory to be announced. CRQ: FCNS 320.

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 409, or consent of school.

491. LEADERSHIP SEMINAR IN HOSPITALITY AND TOURISM (2). Address key characteristics and practices of hospitality leaders and leadership skills required to develop high-performance teams and employee empowerment. PRQ: FCNS 418.

492. DISTINGUISHED SPEAKER SERIES (1-2). Industry leaders representing the hospitality and tourism industries are invited to speak on their vision and the challenges that they face. May be repeated to a maximum of two semester hours when subjects vary. PRQ: Consent of school.

495. INTERNSHIP IN HOSPITALITY MANAGEMENT (1-15). Supervised participation in professional settings. Includes experiences appropriate to professional interests in the hospitality industry. PRQ: FCNS 302 with a grade of C or better or FCNS 316 with a grade of C or better, and FCNS 498 with a grade of C or better.

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 major, 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. See "Educator Licensure Requirements." PRQ: Minimum 2.75 GPA and passing the Test of Academic Proficiency in the Illinois Licensure Testing System.

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 educator licensure 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.

398. COOPERATIVE EDUCATION FOR FAMILY AND INDIVIDUAL DEVELOPMENT (3). Advanced cooperative work experience for students in the family and individual development emphasis 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 may be used. May be repeated to a maximum of 6 semester hours. Open only to declared Family and Child Studies majors in the Family and Individual Development emphasis with senior standing. PRQ: A grade of C or better in FCNS 280 or PSYC 225; and a grade of C or better in FCNS 284; and declared family and individual development major, senior standing; and at least two of the following: FCNS 437, FCNS 438, FCNS 482, FCNS 483, FCNS 488; and consent of school.

446. ORGANIZATION OF COOPERATIVE WORKFORCE EDUCATION (3). Introduction of organizational principles, development, and structure of cooperative workforce education programs in school settings.

447. SUPERVISION OF COOPERATIVE WORKFORCE EDUCATION (3). Examines coordination and operation of cooperative workforce education programs in school settings, including selection of students, selection and maintenance of training stations, student placement, related instruction and program management.

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 "Educator Licensure Requirements." PRQ: FCNS 344 and FCNS 345, minimum 3.00 GPA in FCNS 344 and FCNS 345.

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. INTRODUCTION TO THE FASHION INDUSTRY (3). Survey of the workings and interrelationships of the various industries and services that comprise the fashion business. Career opportunities in the fashion field.

262. DESIGN TRENDS IN WESTERN COSTUME (3). Survey of western costumes and textiles of past periods and their relationship to contemporary fashion.

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.

289. EXPERIENCES IN TEXTILES, APPAREL, AND MERCHANDISING I (3-30). Approved introductory learning experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FCNS 389 Experiences in Textiles, Apparel, and Merchandising II, total credit hours in both courses may not exceed 30 semester hours. PRQ: 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. Identification of factors that influence quality, selection, and use of apparel products including fiber and fabric analysis. 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; and CHEM 110 and CHEM 111.

354. TAILORING (3). Professional methods and techniques for making suits and coats. PRQ: FCNS 252 or consent of school.

355. MERCHANDISING MATHEMATICS (3). Application of mathematical concepts and calculations in fashion merchandising. PRQ: FCNS 152 with a grade of C or better and FCNS 258 with a grade of C or better; and MATH 210 or MATH 211 or MATH 229.

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.

369. 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 262, and FCNS 353, or consent of school.

389. EXPERIENCES IN TEXTILES, APPAREL, AND MERCHANDISING II (3-30). Approved advanced learning experiences and related training programs supervised by a professional specialist. When credit is earned in conjunction with FCNS 289, Experiences in Textiles, Apparel, and Merchandising I, total credit hours in both courses may not exceed 30 semester hours. PRQ: Consent of school.

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.

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 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 sociocultural 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 262, 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 and FCNS 353.

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. 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.

469. COMPUTER-AIDED FASHION DESIGN (3). The use of computer software in rendering fashion images, including textile patterns, flats, and fashion figures. PRQ: FCNS 369.

470. FASHION MERCHANDISING (3). Functions and practices of retail fashion store management and organization. Observation of the operation of stores. PRQ: FCNS 353, MATH 210 or MATH 211 or MATH 229, and MKTG 310.

471. ADVANCED BUYING AND SOURCING IN THE FASHION INDUSTRY (3). Solving strategic problems in fashion industry using technology applications for buying and sourcing. Assortment planning, market purchase and sales promotion planning, inventory management, pricing and markdown strategies, timing and sourcing. PRQ: FCNS 355 and MKTG 310 and MGMT 333.

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 are due March 15 prior to the summer session. PRQ: FCNS GPA of 3.00 or above, and a minimum of 9 semester hours in major, and 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 children from 0-5 years of age, diverse learners and learning environments. CRQ: FCNS 230 or EPS 304 or PSYC 324.

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 or EPS 304 or PSYC 324 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 or EPS 304 or PSYC 324 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 or EPS 304 or PSYC 324 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 or EPS 304 or PSYC 324 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. See special requirements under Family Social Services emphasis. PRQ: FCNS 180 with a grade of C or better, admission to the family social services emphasis, and at least junior standing.

383. CLINICAL APPLICATIONS IN FAMILY SOCIAL SERVICES (3). Introduction to theory and techniques of family intervention with exposure to interviewing. See special requirements under Family Social Services emphasis. PRQ: FCNS 382 with a grade of C or better; 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 or ECS major, FCNS 230 or EPS 304 or PSYC 324 and FCNS 280 or PSYC 225 and at least junior standing.

433. INTRODUCTION TO CHILD LIFE THEORY AND PRACTICE (3). Educate and prepare students for working with pediatric patients and families in the healthcare setting. Through reviewing of the theoretical framework and exploration of the clinical role of the Child Life practice, students will gain knowledge of the importance of play and preparation for the child and family in the healthcare setting. PRQ: FCNS 230 or EPS 304 or PSYC 324, and FCNS 284.

434. ADMINISTRATION AND SUPERVISION OF QUALITY PROGRAMS FOR YOUNG CHILDREN FROM DIVERSE BACKGROUNDS (3). Planning the total inclusive program: the administration and supervision of various types of quality inclusive group care for children from diverse backgrounds. Topics to promote quality care and education, including program philosophy, program assessments, personnel supervision and management, financial management, leadership, and advocacy. Service learning and professional association components. PRQ: FCNS 230 or EPS 304 or PSYC 324, 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 230 or FCNS 280 and FCNS 284.

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 or EPS 304 or PSYC 324 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 major and FCNS 180 and FCNS 280 and FCNS 284.

482. CHILD ABUSE AND NEGLECT (3). Overview of child maltreatment, neglect, and family violence. Consequences of child maltreatment for child development. Summary of laws regarding child maltreatment. The professional's role in prevention and mandated reporting. PRQ: FCNS 284; and FCNS 230 or FCNS 280 or EPS 304 or PSYC 225 or PSYC 324.

483. SOCIAL POLICY, CHILDREN AND FAMILIES (3). Impact of social policy on children and families with a focus on the U.S. Roles and responsibilities of family professionals regarding policy that affects families. Application to current issues. PRQ: FCNS 284; and FCNS 230 or FCNS 280 or EPS 304 or PSYC 225 or PSYC 324.

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 major, 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: FCNS 280 or PSYC 225, and FCNS 284, or consent of school.

488. WORKING WITH ETHNICALLY DIVERSE CHILDREN AND FAMILIES IN THE U.S. (3). Influences of culture and ethnicity on family dynamics and child development. Historical, social, economic, political, and environmental factors that impact family processes and child rearing practices of ethnically diverse groups. Professional skills for effectively interacting with and serving culturally diverse populations. PRQ: FCNS 284 and one of the following: FCNS 230, or FCNS 280/PSYC 225, and at least junior standing.

489. TOPICAL ISSUES IN FAMILY AND CHILD STUDIES (3). Selected topics affecting child development and family life. May be repeated to a maximum of 6 semester hours when topic changes. PRQ: FCNS 284; and one of the following: FCNS 230 or FCNS 280 or EPS 304 or PSYC 225 or PSYC 324.

490. PRACTICUM IN INFANT AND CHILD DEVELOPMENT LABORATORIES (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. PRQ: FCNS 498 and see emphasis 3, child development, special requirements.

Family Consumer, and Nutrition Sciences Faculty

Thomas Pavkov, Ph.D., Northwestern University, professor, chair
Sheila Barrett, Ph.D., Florida International University, assistant professor

Susan P. Bowers, Ph.D., Ohio State University, associate professor

Sarah L. Cosbey, Ph.D., Iowa State University, associate professor

Barb Cuppett, M.A., St. Mary's College of Minnesota, supportive professional staff

Linda E. Derscheid, Ph.D., University of Iowa, associate professor
Shi-Ruei Sherry Fang, Ph.D., Michigan State University, professor

Beverly Henry, Ph.D., Loyola University, associate professor

Hyun-Mee Joung, Ph.D., Iowa State University, associate professor

Lan Li, Ph.D., Virginia Polytechnic Institute and State University, professor

Xiaohui (Sophie) Li, Ph.D., University of Minnesota, Twin Cities, assistant professor

Amy Lofthouse, M.S., Northern Illinois University, supportive professional staff

Judith Lukaszuk, Ph.D., University of Pittsburgh, associate professor

J. Elizabeth Miller, Ph.D., University of Georgia, associate professor

Bette Montgomery, Ph.D., University of Wisconsin, associate professor

Eunha Myung, Ph.D., University of Nevada-Las Vegas, associate professor

Jane Rose Njue, Ph.D., Iowa State University, associate professor

Amy Ozier, Ph.D., University of Alabama, associate professor

Nancy Prange, M.S., Northern Illinois University, supportive professional staff

Aimee D. Prawitz, Ph.D., Louisiana State University, professor emeritus

Julie Ramisch, Ph.D., Michigan State University, assistant professor

Emily Reilly, M.S., Northern Illinois University, supportive professional staff

Jessica Ridgway, Ph.D., University of Missouri, Columbia, assistant professor

Lin Shi, Ph.D., Texas Tech University, associate professor

Florensia Flora Surjadi, Ph.D., Iowa State University, assistant professor

Josephine Umoren, Ph.D., University of Nebraska, associate professor

Rachel Wilson, M.S., Northern Illinois University, supportive professional staff

Charline Xie, Ph.D., University of Nebraska at Lincoln, 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 noncommissioned 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 nonfederal scholarship advanced course cadet may participate in the SMP by enlisting in the Army National Guard or U.S. Army Reserve. The purpose of the SMP is to provide an 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 2.50 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. Waivers must be reapplied for each semester and will be granted on merit.

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), MILS 202 - Foundations of Tactical Leadership (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 Tactical Leadership (3)
 MILS 302 - Leadership in Changing Environments (3)
 MILS 401 - Developing Adaptive Leaders (4)
 MILS 402 - Leadership in a Complex World (4)
 Course work from the following (6)
 MILS 350¹ - Advanced Internship in Military Science (3),
 OR MILS 495 - Independent Study (3)
Military history
 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 - Topics in Contemporary Security (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)
 TECH 402 - Industrial Training and Evaluation (3)
 TECH 404 - Supervision in Industry (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 (HIST 379) or an approved equivalent.

Course List

Basic

101. LEADERSHIP AND PERSONAL DEVELOPMENT (2). Introduces cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, goal setting, stress management, physical fitness, and time management relate to leadership, officership, and the Army profession. Focus is on developing basic knowledge and comprehension of Army Leadership Dimensions while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student.

102. FOUNDATIONS IN LEADERSHIP (2). An overview of leadership fundamentals such as setting direction, problem solving, listening, 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, and interactive exercises.

¹ Available to contracted cadets only.

² Also meets PME requirement for commissioning.

201. INNOVATIVE TACTICAL LEADERSHIP (2). Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Cadets practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises and participating in leadership labs. Focus is on continued development of the knowledge of leadership values and attributes through an understanding of Army rank, structure, duties, and basic aspects of land navigation and squad tactics. Case studies provide tangible context for learning the Soldier's Creed and Warrior Ethos as they apply in the contemporary operating environment (COE).

202. FOUNDATIONS OF TACTICAL LEADERSHIP (2). Examines the challenges of leading tactical teams in complex, contemporary operational environments. The course highlights dimensions of patrolling and operations orders. Further study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give 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 TACTICAL LEADERSHIP (3). Challenges cadets to study, practice, and evaluate adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, cadets continue to develop their leadership and critical thinking abilities. The focus is on cadets' tactical leadership abilities to enable them to succeed at ROTC's summer Leader Development and Assessment Course (LDAC). PRQ: MILS 201 and MILS 202, or military science minor, or consent of department.

302. LEADERSHIP IN CHANGING ENVIRONMENTS (3). Uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading tactical operations up to platoon level. Cadets review aspects of combat, stability, and support operations. Cadets are expected to apply basic principles of the Law of Land Warfare, Army training, and motivation to troop leading procedures. They also conduct military briefings and develop proficiency in garrison operations orders. Focus is on exploring, evaluating, and developing skills in decision-making, persuading, and motivating team members in the contemporary operating environment (COE). Cadets are evaluated on what they know and do as leaders as they prepare to attend the ROTC summer Leader Development and Assessment Course (LDAC). 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. 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 cadet proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing performance feedback to subordinates. Cadets assess risk, make ethical decisions, and lead fellow ROTC cadets. Lessons on military justice and personnel processes prepare cadets to make the transition to Army Officers. Cadets analyze, evaluate, and instruct cadets at lower levels. Both classroom and battalion leadership experiences are designed to prepare cadets 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 in the contemporary operating environment (COE). Cadets examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. They also explore aspects of interacting with nongovernment organizations, civilians on the battlefield, and host nation support. 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 officers 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 David Dosier, M.H.R., University of Oklahoma, professor of military science, chair
 Master Sergeant Rufus Beamon, B.A., American Military University, senior military instructor
 Rodney Williams, M.B.A., Strayer University, scholarship and enrollment officer/instructor
 Major Amandy Bradley, M.B.A., Loyola University, adjunct instructor
 Staff Sergeant Justin Wolfe, adjunct instructor

School of Nursing and Health Studies (NURS, PHHE)

Admission to the major in nursing in the School of Nursing and Health Studies is limited. See “Limited Admissions and Limited Retention Requirements” in the Admission section of this catalog.

The School of Nursing and Health Studies offers majors in nursing (B.S.), public health (B.S.), and health education (B.S.Ed.), minors in public health and health education, and baccalaureate degree completion programs. Students interested in one of the school's majors or minors should contact the college advising office as early as possible. Failure to do so could result in delayed graduation.

Majors in the School of Nursing and Health Studies 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.

Nursing Program

The School of Nursing and Health Studies offers the B.S. degree with a major in nursing, successful completion of which allows the graduate to write the National Council Licensure Examination (NCLEX-RN) required for licensure as a registered professional nurse (R.N.). The Illinois Department of Professional and Financial Regulation requires a criminal background check prior to taking the NCLEX-RN examination. A final determination of eligibility for licensure can only be made after an application for license by examination has been submitted by the graduate. 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 Financial and Professional Regulation and accredited by the Commission on Collegiate Nursing Education.

Clinical Requirements

All students are admitted to the nursing program provisionally until they have provided proof of meeting the clinical requirements outlined in the Undergraduate Nursing Student Handbook and then they will be fully admitted. Full admission to the nursing program is required to enroll in nursing courses. All undergraduate nursing majors are required to submit proof of having met clinical requirements when requested and must maintain clinical requirements for continued enrollment in the nursing major. If requirements are not met, the student might

not be able to complete the program of required courses, which includes clinical practice experiences. The Undergraduate Nursing Student Handbook contains additional policies related to admission and progression through the nursing program.

Clinical requirements include documentation of immunizations/immunity, criminal background checks, drug screening, Standard Precautions/Universal Precautions training, CPR Healthcare Provider certification, and health insurance. Professional Liability Insurance is provided as part of student fees.

Students are required to undergo criminal background checks and drug screenings and are evaluated for a disqualifying criminal offense under Illinois regulations for health care workers. A student with a disqualifying offense will be unable to complete the program. Those who commit a crime while enrolled in the nursing program may be unable to complete the program.

Students with a positive drug screen for illegal or unauthorized drugs may be unable to complete the program.

All clinical requirements are to be maintained throughout the nursing program as outlined in the Undergraduate Nursing Student Handbook.

General Information

Only students admitted as undergraduate nursing majors may enroll in the undergraduate nursing courses, with the exception of NURS 302 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.

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 303, NURS 313, NURS 323, NURS 333, NURS 343, NURS 433, NURS 443, NURS 453, and NURS 463);

- professional liability insurance;

- criminal background checks and drug screening;

- clinical requirement fees; and

- fees for certain courses.

Students enrolled in clinical nursing courses must complete all prerequisites.

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. Registered nurse degree-completion students must plan on a minimum of at least three semesters to complete the required nursing courses. See

"Admission" for further information. Upon successful completion of NURS 347, the R.N. student will receive 33 semester hours of credit for NURS 303, NURS 305, NURS 313, NURS 314, NURS 315, NURS 318, NURS 319, NURS 323, NURS 333, NURS 336, NURS 343, NURS 422, and NURS 433. 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. Students in this program are exempt from the 30 semester hour university residence requirement.

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 304, NURS 307, NURS 308, NURS 312; NURS 347; NURS 408, NURS 419, NURS 425, NURS 432, NURS 435, NURS 463, and NURS 488.

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 or U in any combination of NURS courses will be dismissed from the School of Nursing and Health Studies. 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 and Health Studies.

Students must repeat any required nursing course in which they receive a grade of D or F or U. Students must receive a grade of at least C or a grade of S to progress in the nursing curriculum. See "Repeating a Course."

To graduate as a nursing major, a student must earn a grade of at least C or S in each course required in the major and all prerequisite courses for the major.

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 nursing program 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (61-65)

NURS 302 - Professional Nursing (2),
OR NURS 347¹ - Concepts of Professional Nursing (4)
NURS 303 - Foundations of Nursing Clinical (2)
NURS 304 - Health Assessment (1)

* Available for general education credit.

¹ For Registered Nurse students only.

NURS 305 - Foundations of Nursing (3)
 NURS 307 - Health Assessment Laboratory (1)
 NURS 308 - Alterations in Biological Systems (3)
 NURS 312 - Nursing Research and Evidenced-Based Practice (3)
 NURS 313 - Adult Health Nursing I Clinical (2)
 NURS 314 - Mental Health Nursing (3)
 NURS 315 - Adult Health Nursing I (3)
 NURS 318 - Adult Health Nursing II (3)
 NURS 319 - Nursing Care of the Childbearing Family (3)
 NURS 323 - Mental Health Nursing Clinical (2)
 NURS 333 - Adult Health Nursing II Clinical (2)
 NURS 336 - Pharmacology (3)
 NURS 343 - Childbearing Family Clinical (2)
 NURS 349X - Critical Thinking for Health and Human Services Professionals (3),
 OR UHHS 350 Critical Thinking for Health and Human Services Professionals (3)
 NURS 408 - Genetics and Human Genomics for Nurses (1)
 NURS 419 - Population-Focused Nursing (3)
 NURS 422 - Child Health Nursing (3)
 NURS 425 - Nursing Informatics (1)
 NURS 431² - Transition to Professional Nursing (3),
 OR NURS 488³ - Nursing Ethics and the Law (3)
 NURS 432 - Processes for Nursing Leadership (3)
 NURS 433 - Child Health Nursing Clinical (2)
 NURS 435 - Gerontological Nursing (2)
 NURS 443 - Population-Focused Nursing Clinical (2) and NURS 453 Capstone Clinical (4),
 OR NURS 463 - Practicum in Leadership and Population-Focused Nursing (3)

Requirements outside School (31-33)

BIOS 103 - General Biology (3) and BIOS 105 - General Biology 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 210 - 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: 92-98

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 and Health Studies.

Public Health and Health Education Programs

General Information

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 general public health, health administration, environment and health, and health promotion. Depending on their particular interests, graduates will be involved in developing and communicating health information to the public, planning and managing health service programs and facilities, and investigating and evaluating specific environmental and community health problems. Degree completion in public health is available to practicing health care professionals. See emphasis I for details. Students aspiring to major in public health should contact a program adviser as early as possible, preferably during their freshman year, for an academic advising session. Failure to do so could result in a delayed graduation.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (25-28)

PHHE 295 - Introduction to Public Health (3)
 PHHE 325 - Biostatistical Applications in Public Health (3)
 PHHE 351 - Elements of Environmental Health (3)
 PHHE 455 - Public Health Epidemiology (3)
 PHHE 461 - Public Health and the U.S. Health Care System (3)
 PHHE 467 - Public Health Research and Evaluation (3)
 PHHE 469 - Principles of Health Planning (3)
 PHHE 487 - Public Health Pre Practicum Seminar (1)
 PHHE 489 - Practicum in Public Health (3-6)

Requirements outside School (29-33)

AHCD 318 - Medical Terminology (3)
 BIOS 103 - General Biology (3) and BIOS 105 - General Biology Laboratory (1),
 OR BIOS 208 - 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 109 - Human Biology (3),
 OR BIOS 357 - Human Anatomy and Physiology (5)
 *CHEM 110 - Chemistry (3) and *CHEM 111 - Chemistry Laboratory (1),
 OR *CHEM 210 - General Chemistry I (3) and *CHEM 212 - General Chemistry Laboratory I (1)
 ETT 429 - Computers in Classroom Teaching (3),
 OR *CSCI 205 - Introduction to Computing (3)
 ENGL 350 - Writing Across the Curriculum (3)
 *MATH 210 - Finite Mathematics (3),
 OR *MATH 211 - Calculus for Business and Social Sciences (3),
 OR *MATH 229 - Calculus I (4)
 *SOCI 170 - Introduction to Sociology (3),
 OR *SOCI 250 - Contemporary Social Institutions (3)

One of the following emphases: General Public Health, Health Administration, Environment and Health, or Health Promotion

Emphasis 1. General Public Health

The general public health emphasis allows students to complete a broad educational foundation in public health while choosing a minor outside the school, or qualifying for the public health degree completion program.

Requirements in School (9)

PHHE 315 - Introduction to Health Promotion (3)
 Two of the following (6)
 PHHE 431 - Applied Health Promotion Programming (3)
 PHHE 433 - Principles of Long-term Care Administration (3)
 PHHE 435 - Ethical Decision Making for Health Professionals (3)
 PHHE 437 - Assessment, Treatment and Prevention of Drug and Alcohol Addiction (3)
 PHHE 439 - Funding for Programs in Public Health (3)

* Available for general education credit

¹ If not used to fulfill requirements outside school above.

² Prelicensure students only.

³ For Registered Nurse students only.

PHHE 441 - Introduction to Health Care Administration (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)
 PHHE 463 - Public Health Informatics (3)

Requirements outside School (15-33)

One of the following (3)

SOCI 356 - Health, Aging, and Society (3)
 SOCI 451 - Medical Sociology (3)
 SOCI 482 - Sociology of Death and Dying (3)
 IDSP 465 - Issues in Gerontology (3)

One of the following designations (12-30)

A minor offered by the School of Family, Consumer, and Nutrition Sciences, or a minor in biological sciences, chemistry, communication studies, communicative disorders, gerontology, environmental management systems, military science, community leadership and civic engagement, environmental studies, Spanish, or psychology.

OR Qualified for the public health degree completion program.

B.S. in Public Health Degree Completion Program

The B.S. public health degree completion program in the general public health emphasis 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 PHHE 481 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 PHHE 487, PHHE 489, variable credit in PHHE 481, as well as credit to be determined by the department based on professional course work of the student. Students in this program are exempt from the 30 semester hour university residence requirement. Students interested in the B.S. in public health degree completion program should contact a program adviser for a pre-admission interview and course counseling session.

Total Hours for Emphasis 1, General Public Health: 78-103

Emphasis 2. Health Administration

The health administration emphasis teaches students administrative, supportive, planning, and assessment skills that prepares students for careers in managed-care settings; long-term care; hospitals; federal, state, and community health agencies, and other health-related organizations. With appropriate electives, students qualify to take the Illinois Nursing Home Administrators Licensing Examination. For details contact the public health program office.

Requirements in School (15)

PHHE 441 - Introduction to Health Care Administration (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)

Two of the following (6)

PHHE 315 - Introduction to Health Promotion (3)
 PHHE 431 - Applied Health Promotion Programming (3)
 PHHE 433 - Principles of Long-term Care Administration (3)
 PHHE 435 - Ethical Decision Making for Health Professionals (3)
 PHHE 437 - Assessment, Treatment and Prevention of Drug and Alcohol Addiction (3)
 PHHE 439 - Funding for Programs in Public Health (3)
 PHHE 463 - Public Health Informatics (3)

Requirements outside School (27-31)

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)
 FINA 320 - Principles of Finance (3),
 OR OMIS 338 - Principles of Operations Management (3)
 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 356 - Health, Aging, and Society (3),
 OR SOCI 451 - Medical Sociology (3),
 OR SOCI 482 - Sociology of Death and Dying (3),
 OR IDSP 465 - Issues in Gerontology (3)
 UBUS 223 - Introduction to Business Statistics (3),
 OR STAT 301 - Elementary Statistics (4)

Total Hours For Emphasis 2, Health Administration: 96-107

Emphasis 3. Environment and Health

The requirements in the school for the environment and health emphasis prepare students to work in a variety of environmental settings that focus on eliminating health disparities of the public.

Requirements in School (9-10)

PHHE 315 - Introduction to Health Promotion (3)

Two of the following (6-7)

PHHE 409X - Water Quality (4)
 PHHE 431 - Applied Health Promotion Programming (3)
 PHHE 435 - Ethical Decision Making for Health Professionals (3)
 PHHE 439 - Funding for Programs in Public Health (3)
 PHHE 441 - Introduction to Health Care Administration (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)
 PHHE 463 - Public Health Informatics (3)

Requirements outside School (27-31)

GEOG 253 - Environment and Society (3)

*PHYS 150 - Physics (3),

OR *PHYS 150A - Physics (4),

OR *PHYS 210 - General Physics I (4)

*TECH 245 - Pollution Prevention and Sustainable Production (3)

Two of the following:

GEOG 256 - Maps and Mapping (3)
 GEOG 302 - Soil Science (4)
 GEOG 303 - Water Resources and the Environment (3)
 GEOG 432 - Geography of Health (3)

Two of the following:

TECH 231 - Safety Programs (3)
 TECH 432 - Disaster Preparedness (3)
 TECH 434 - Human Factors in Industrial Accident Prevention (3)
 TECH 435 - Legal Aspects of Safety (3)

Two courses in science approved by the public health adviser (6-8)

Total Hours for Emphasis 3, Environment and Health: 90-102

Emphasis 4. Health Promotion

The requirements for the health promotion emphasis prepare students to become health educators in health care or social assistance settings. They educate individuals and communities about behaviors that can prevent diseases, injuries, and other health issues. In addition, the health promotion emphasis prepares students to take the Certified Health Education Specialist Exam (CHES) given by the National Commission for Health Education Credentialing, Inc.

Requirements in School (18)

- PHHE 304 - Drug Use and Abuse (3),
 OR PHHE 437 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 315 - Introduction to Health Promotion (3)
 PHHE 431 - Applied Health Promotion Programming (3)
 One of the following (3)
 PHHE 408 - Mental and Emotional Health (3)
 PHHE 410 - Death Education (3)
 PHHE 412 - Consumer Health (3)
 One of the following (3)
 PHHE 433 - Principles of Long-term Care Administration (3)
 PHHE 435 - Ethical Decision Making for Health Professionals (3)
 PHHE 439 - Funding for Programs in Public Health (3)
 PHHE 441 - Introduction to Health Care Administration (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)
 PHHE 463 - Public Health Informatics (3)

Requirements outside School (12)

- COMS 200 - Advanced Public Speaking (3),
 OR COMS 304 - Introduction to Persuasion Theory (3)
 *FCNS 201 - Human Nutrition (3)
 SOCI 356 - Health, Aging, and Society (3),
 OR SOCI 451 - Medical Sociology (3),
 OR SOCI 482 - Sociology of Death and Dying (3),
 OR *FCNS 280 - Human Development, the Family, and Society (3),
 OR IDSP 465 - Issues in Gerontology (3),
 OR *PSYC 225 - Lifespan Development: Childhood through Adulthood (3)
 One of the Following:
 CAHA 401 - Introduction to Adult and Higher Education (3)
 CAHC 400 - Exploration in the Counseling Profession (3)
 EPS 300 - Educational Psychology (3)

Total Hours for Emphasis 4, Health Promotion: 84-91**Major in Health Education (B.S.Ed.)**

Graduates with a B.S.Ed. in health education are qualified to apply for educator licensure and to teach in public or private schools. Those completing the 6-12 entitlement program leading to licensure are eligible to be licensed 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), science, mathematics, physical education, psychology, or a social science.

The B.S.Ed. in health education is the initial professional degree for licensed 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 Licensure Testing System (ILTS) Test of Academic Proficiency is required for entry into the health education educator licensure program. The test bulletins and applications are available at the Office of Testing Services and in the public health and health education programs office. Students who intend to enter a educator licensure program need to take the ILTS Test of Academic Proficiency at the earliest possible date.

All students seeking admission to the health education educator licensure program are required to have a minimum cumulative GPA of 2.75, a grade of C or better in PHHE 220, and pass the

ILTS Test of Academic Proficiency. These requirements must be met prior to admission to PHHE 300. Admission to PHHE 300 constitutes admission to the health education educator licensure program.

Students must maintain a minimum cumulative GPA of 2.75 and must obtain a grade of C or better in each of the following courses for retention in the health education educator licensure program: FCNS 201 or FCNS 405, and PHHE 300, PHHE 402, PHHE 404, PHHE 406, and PHHE 408, PHHE 410, PHHE 412 or PHHE 472. Students are encouraged to maintain close contact with their adviser as the educator licensure program in health education is tightly sequenced.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (40-42)

- PHHE 206 - Contemporary Health Concepts (3)
 PHHE 220 - Introduction to Health Education (3)
 PHHE 300 - Health Education in the Middle and High School (3)
 PHHE 400 - Methods and Materials in School Health Education (3)
 PHHE 402 - Community Health Programs and Issues (3)
 PHHE 404 - Drug Education (3)
 PHHE 406 - Sexuality Education (3)
 PHHE 408 - Mental and Emotional Health (3)
 PHHE 482 - Clinical/Field Experience in Health Education (1-3)
 PHHE 484 - Middle School Student Teaching in Health Education (6)
 PHHE 486 - Secondary School Student Teaching in Health Education (6)
 One of the following (3)
 PHHE 302 - Colloquium in School Health Education (3)
 PHHE 304 - Drug Use and Abuse (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 410 - Death Education (3)
 PHHE 412 - Consumer Health (3)
 PHHE 472 - Current Issues: Health Education (1-3)

Requirements outside School (37-41)

- 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)
 EPS 419 - The Middle School (3)
 ETR 440 - Secondary Classroom Assessment (3)
 ETT 229 - Computers in Education (3),
 OR pass ETT proficiency examination (0)
 ETT 402 - Teaching and Learning with Technology (3)
 *FCNS 201 - Human Nutrition (3),
 OR FCNS 405 - Child Health and Nutrition (3)
 LTIC 301 - Teaching with a Multicultural Perspective (3)
 LTRE 310 - Teaching Reading in the Secondary School (3),
 OR LTRE 311 - Content Area Literacy Instruction (3)
 PSYC 225 - Lifespan Development: Childhood Through Adulthood (3),
 OR PSYC 219 - Mental Hygiene (3)
 TICI 422 - Middle School Organization and Instruction (3)
 SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

Additional Requirements

See "Educator Licensure Requirements" and health education educator licensure coordinator.

Total Hours for Major in Health Education (B.S.Ed.): 77-83**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. Nursing and health education majors are eligible to complete this minor.

Requirements (18)

PHHE 295 - Introduction to Public Health (3)
 PHHE 315 - Introduction to Public Health Programs and Issues (3)
 PHHE 455 - Public Health Epidemiology (3)
 PHHE 461 - Principles of the Organization of Public Health and Health Care Programs (3)
 Two of the following (6)
 AHCD 318 - Medical Terminology (3)
 PHHE 351 - Elements of Environmental Health (3)
 PHHE 431 - Applied Health Promotion Programming (3)
 PHHE 437 - Assessment, Treatment, and Prevention of Drug and Alcohol Addiction (3)
 PHHE 439 - Funding for Programs in Public Health (3)
 PHHE 451 - Economic Issues in Public Health (3)
 PHHE 453 - Financial Management of Health Care Organizations (3)
 PHHE 467 - Public Health Research and Evaluation (3)
 PHHE 469 - Principles of Health Planning (3)

Minor in Health Education (32)

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 a minimum cumulative GPA of 2.75, a grade of C or better in PHHE 220, and passed the ILTS Test of Academic Proficiency prior to enrolling in 300-level professional health education courses.

Students should plan their programs of study in cooperation with faculty in health education.

KNPE 262 - First Aid and CPR (2)
 *PHHE 206 - Contemporary Health Concepts (3)
 PHHE 220 - Introduction to Health Education (3)
 PHHE 300 - Health Education in the Middle and High School (3)
 PHHE 400 - Methods and Materials in School Health Education (3)
 PHHE 402 - Community Health Programs and Issues (3)
 PHHE 404 - Drug Education (3)
 PHHE 406 - Sexuality Education (3)
 PHHE 408 - Mental and Emotional Health (3)
 TLCI 422 - Middle School Organization and Instruction (3)
 One of the following (3)
 *FCNS 201 - Human Nutrition (3),
 OR FCNS 405 - Child Health and Nutrition (3)
 PHHE 302 - Colloquium in School Health Education (3)
 PHHE 304 - Drug Use and Abuse (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 410 - Death Education (3)
 PHHE 412 - Consumer Health (3)
 PHHE 472 - Current Issues: Health Education (1-3)

Course List

Nursing (NURS)

302. PROFESSIONAL NURSING (2) Overview of systems within nursing and healthcare, including collaborative roles of the healthcare team. Introduction to the major concepts related to the roles of the professional nurse as implemented in today's healthcare environment to provide safe, effective, quality, holistic, patient-centered healthcare. Introduction to historical and cultural healthcare trends and the professional standards with legal, and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. Not open to students with R.N. status. PRQ: PSYC 102. CRQ: ENGL 104 or ENGL 105.

303. FOUNDATIONS OF NURSING CLINICAL (2). Acquisition of foundational psychomotor, psychosocial, and critical thinking skills necessary for providing safe, holistic, patient-centered nursing care to a diverse patient population while integrating the legal and ethical responsibilities as a provider of care. Application of these skills in a laboratory and structured clinical setting. CRQ: NURS 305.

304. HEALTH ASSESSMENT (1). Theoretical basis for assessing the health status of individuals emphasizing cultural diversity, age-related differences, and lifestyle factors. Introduction to the role of the professional nurse in identifying and communicating normal findings and common deviations from normal. Introduction to healthcare information management principles. CRQ: NURS 305 or R.N. status; and NURS 307.

305. FOUNDATIONS OF NURSING (3). Foundational concepts necessary for providing safe, holistic, patient-centered care to a diverse patient population while integrating the legal and ethical responsibilities as a provider of care. Introduction to critical thinking, evidence-based practice, and the nursing process. Identification of communication techniques used when interacting with patients and members of the interdisciplinary team. PRQ: BIOS 213 and BIOS 357 and FCNS 201; and FCNS 280 or PSYC 225. CRQ: UHHS 350 or NURS 349X; and NURS 302.

307. HEALTH ASSESSMENT LABORATORY (1). Application of cognitive, psychomotor, communication, and critical thinking skills in the performance of a systematic, holistic health assessment by nurses. Emphasis on cultural diversity, age-related differences, and lifestyle factors of patients. CRQ: NURS 304.

308. ALTERATIONS IN BIOLOGICAL SYSTEMS (3). Introduction to the functional changes in cells, tissues, organs, and individuals altered by disease and/or injury. Examines both descriptive evidence and an evaluative component of diseases to understand the scientific basis for planning patient-centered care. Introduces the role of the nurse in using clinically-related sciences to plan nursing care. CRQ: NURS 305 or R.N. status.

312. NURSING RESEARCH AND EVIDENCE-BASED PRACTICE (3). Principles, methodology, and appraisal of the research process for the development of nursing science knowledge as related to critical thinking skills and evidence-based nursing practice. Research principles and methodologies as they relate to the nurse's role in the identification of practice issues. Critique and integration of research findings related to evidence-based nursing practice and evaluation of patient outcomes. Strategies for collaborative research with the interprofessional team. PRQ: STAT 208 or STAT 301; and NURS 303 and NURS 304 and NURS 305 and NURS 307 and NURS 308; and UHHS 350 or NURS 349X; or R.N. status.

313. ADULT HEALTH NURSING I CLINICAL (2). Application of the theoretical basis for safe evidence-based, quality, holistic, patient-centered nursing care for patients with various medical/surgical conditions. Focus on care that is developmentally and culturally appropriate. Emphasis on the nurse's skill as caregiver, communicator, and critical thinker in a structure clinical setting. Integration of legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care and member of a profession. Introduction to information management principles, techniques, and systems when providing collaborative nursing care. S/U grading. CRQ: NURS 312.

314. MENTAL HEALTH NURSING (3). Theoretical basis of safe nursing care for the enhancement of mental health, prevention of mental illness, and care of patients with mental health disorders. Focus on individuals, families, and groups of a diverse population. Integration of critical thinking skills, evidence-based practice, legal aspects, and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care and member of a profession. CRQ: NURS 312.

315. ADULT HEALTH NURSING I (3). Application of knowledge and critical thinking skills necessary for safe, quality, holistic, patient-centered nursing care to a diverse adult population. Focus on selected medical/surgical conditions. Includes standards of practice and legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. CRQ: NURS 312.

318. ADULT HEALTH NURSING II (3). Acquisition of nursing theory and critical thinking skills necessary for safe, quality, holistic, patient-centered nursing care to a diverse adult population. Focus on medical-surgical conditions. Includes standards of practice and legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. PRQ: NURS 312 and NURS 313 and NURS 314 and NURS 315 and NURS 323.

319. NURSING CARE OF THE CHILDBEARING FAMILY (3). Acquisition of essential content and critical thinking skills necessary for safe, quality, and patient/family-centered nursing care during the reproductive experience. Applies the professional standards with legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care and member of a profession. CRQ: NURS 318.

323. MENTAL HEALTH NURSING CLINICAL (2). Application of the theoretical basis of safe, evidence-based, quality, holistic nursing care for the enhancement of mental health, prevention of mental illness, and the care of patients with mental health disorders. Focus on individuals, families, and groups of diverse populations. Integration of evidenced-based practice, legal aspects, and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. Recognition of the nursing leadership role for the purpose of providing and improving patient care. Participation in collaborative relationships with members of the interdisciplinary team. S/U grading. CRQ: NURS 312.

333. ADULT HEALTH NURSING II CLINICAL (2). Application of the theoretical basis of safe, evidence-based, quality, holistic, patient-centered nursing care for patients with various medical/surgical conditions. Focus on care that is developmentally and culturally appropriate for patients and their families. Emphasis on the nurse's skill as caregiver, communicator, critical thinker, teacher, and collaborator in a structured clinical setting. Integration of legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. Application of information management principles, techniques, and systems when providing collaborative nursing care. Recognition of the nursing leadership role for the purpose of providing and improving patient care. S/U grading. CRQ: NURS 318.

336 PHARMACOLOGY (3). Application of general principles of pharmacology as they relate to safe, quality, patient-centered and evidence-based nursing care of individuals. Focus on developmentally and culturally appropriate interventions. Emphasis on safety, critical thought, and quality improvement factors in the administration of medications. CRQ: NURS 318.

343. CHILDBEARING FAMILY CLINICAL (2). Application of knowledge and critical thinking skills necessary for safe, quality, patient/family-centered nursing care during the reproductive experience. Focus on care that is developmentally and culturally appropriate. Integration of standards of practice with legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care and member of a profession. Recognizes the nursing leadership role for the purpose of providing and improving patient care. Applies information management principles, techniques, and systems when providing collaborative nursing care. S/U grading. CRQ: NURS 318.

347. CONCEPTS OF PROFESSIONAL NURSING (4). Evaluation of characteristics and roles of the professional nurse as provider of care, designer/manager/coordinator of care, and member of a profession, based on examination of historical, legal, theoretical, and professional trends. Social and political dimensions of professional practice and leadership. Refinement of critical thinking and therapeutic communication skills with patients and collaboration skills with members of the interprofessional team. Focus on the healthcare system's impact on providing safe, evidence-based, quality, holistic, patient-centered nursing care. PRQ: R.N. status.

349X. CRITICAL THINKING FOR HEALTH AND HUMAN SERVICES PROFESSIONALS (3). *Crosslisted as UHHS 350.* Development of critical thinking skills as applied to health and human services professionals. CRQ: NURS 305.

350. INDIVIDUAL STUDY IN NURSING (1-3). 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.

408. GENETICS AND HUMAN GENOMICS FOR NURSES (1). Introduction to genetics and human genomics and their impact on prevention, diagnosis and treatment of diseases, illnesses and conditions. Focus on the nurse's use of this knowledge in the provision of health care for individuals, families and communities. CRQ: NURS 422 or R.N. status.

419. POPULATION-FOCUSED NURSING (3). Application of nursing theory, public health theory, and the critical thinking skills necessary for the enhancement of the health of families, populations and communities with developmentally and culturally appropriate strategies. Emphasis on collaboration with both the interdisciplinary team and diverse populations. Integration of public health nursing standards of practice with legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. CRQ: NURS 422 or R.N. status.

422. CHILD HEALTH NURSING (3). Acquisition of nursing theory and critical thinking skills necessary for safe, child/family-centered nursing care that is developmentally and culturally appropriate. Includes the professional standards with legal and ethical responsibilities of the three roles of the professional nurse as provider of care, designer/manager/coordinator of care, and member of a profession when interacting with children and families. PRQ: NURS 318 and NURS 319 and NURS 333 and NURS 336 and NURS 343.

425. NURSING INFORMATICS (1). Acquisition of nursing theory and critical thinking skills necessary for clinical application of information systems to improve patient outcomes and provide safe patient care. Consideration of ways in which nursing informatics influences and is influenced by fundamental concepts such as ethics, values, communication, and leadership in professional nursing practice. CRQ: NURS 422 or R.N. status.

431. TRANSITION TO PROFESSIONAL NURSING (3). Synthesis of theories, principles, concepts and processes relating to quality patient outcomes of individuals, families, groups and communities across the lifespan. Transition to role of the professional nurse as provider of care, designer/manager/coordinator of care and member of a profession. Integrates critical thinking skills within the nursing process. Focus on the leadership role for the purpose of providing and improving holistic collaborative nursing care. Available for prelicensure students only. PRQ: NURS 408 and NURS 419 and NURS 422 and NURS 425 and NURS 433 and NURS 443.

432. PROCESSES FOR NURSING LEADERSHIP (3). Application of the theoretical basis for the processes used in the nurse's leadership role in a variety of healthcare settings for the purpose of providing and improving patient care that is developmentally and culturally appropriate. Application of critical thinking skills and evidence-based practice as they relate to the nature and functioning of the healthcare system and its impact on nursing practice. Evaluation of procedures used in the leadership role in a variety of healthcare settings. CRQ: NURS 431 or R.N. status.

433. CHILD HEALTH NURSING CLINICAL (2). Application of knowledge and critical thinking skills necessary for safe, child/family-centered nursing care that is developmentally and culturally appropriate. Integration of standards of practice with legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care and member of a profession. Individual transportation required. S/U grading. CRQ: NURS 422.

435. GERONTOLOGICAL NURSING (2). Examines current evidence-based practice related to the aging population and health-care. Theoretical basis for safe, evidence-based, patient-centered nursing care that is developmentally and culturally appropriate for the older adult. Integration of legal and ethical responsibilities of nurse as provider of care, designer/manager/coordinator of care, and member of a profession. CRQ: NURS 431 or R.N. status.

443. **POPULATION-FOCUSED NURSING CLINICAL (2).** Application of nursing theory, public health theory, and critical thinking skills necessary for the enhancement of the health of families, populations, and communities. Practice in diverse community settings, participating in developmentally and culturally appropriate care. Emphasis on both collaborative and independent practice using critical thinking skills. Integration of standards of practice with legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. Participation in the leadership role for the enhancement of community health. S/U grading. CRQ: NURS 419; and NURS 422 or R.N. status.

453. **CAPSTONE CLINICAL (4).** Synthesis of the theoretical basis for safe, evidenced-based, quality patient-centered nursing care for acutely ill patients and their families that is developmentally and culturally appropriate in a healthcare setting. Emphasis on the transition to practice as a professional nurse. Integration of legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. Evaluates critical thinking and clinical reasoning skills when providing safe, evidence-based, quality nursing care. Participates in the leadership role for the purpose of providing and improving collaborative patient care. S/U grading. CRQ: NURS 432; and NURS 431 or R.N. status.

463. **PRACTICUM IN LEADERSHIP AND POPULATION-FOCUSED NURSING (3).** Synthesis of the process for enhancement of health across the lifespan. Emphasis on leadership and management applied to healthcare organizations and the care of culturally diverse aggregates in a community setting. PRQ: NURS 347; and NURS 419 and NURS 432 and R.N. status.

480. **SPECIAL TOPICS IN NURSING (1-3).** 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.

488. **NURSING ETHICS AND THE LAW (3).** Critical appraisal of legal and ethical aspects of issues and problems in healthcare related to professional nursing practice. Integration of legal and ethical responsibilities of the nurse as provider of care, designer/manager/coordinator of care, and member of a profession. PRQ: R.N. status.

499. **SENIOR PROJECT IN NURSING (1-3).** Individual study in nursing for students seeking an Honors capstone experience. May be repeated to a maximum of 6 semester hours.

Public Health and Health Education (PHHE)

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.

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.

220. **INTRODUCTION TO HEALTH EDUCATION (3).** Philosophy, aims, objectives, and principles of health education. Emphasis on the school health education program and educator licensure standards. PRQ: Cumulative GPA of at least 2.50. CRQ: PHHE 206 or consent of school.

295. **INTRODUCTION TO PUBLIC 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.

300. **HEALTH EDUCATION IN THE MIDDLE AND HIGH SCHOOL (3).** Emphasis on learning and identifying health needs and problems of middle and high school students. Study of teacher candidate standards and coordinated school health programs. Clinical experiences in school health education. PRQ: Cumulative GPA of 2.75 or better and completion of PHHE 206 and PHHE 220 with a grade of C or better and successful completion of ILTS Test of Academic Proficiency.

302. **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: PHHE 220, PHHE 300, or consent of school.

304. **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.

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.

315. **INTRODUCTION TO HEALTH PROMOTION (3).** An overview of individual and community-level interventions designed to prevent illness/injury and promote well-being; principles and techniques for promoting and maintaining health; emphasis on the acquisition and maintenance of health enhancing behaviors, the design of health promoting interventions, and their environments. PRQ: PHHE 295.

325. **BIOSTATISTICAL APPLICATIONS IN PUBLIC HEALTH (3).** Fundamental methods and concepts of biostatistics and their application to problems in public health. Exercises and analyses of data from public health settings, the role of statistical principles and analysis in public health and health sciences research, interpretation and utilization of data for public health problem solving and decision making. CRQ: MATH 210, MATH 211, STAT 208, STAT 301, or UBUS 223 and declared public health major, declared public health minor, or consent of school.

351. **ELEMENTS OF ENVIRONMENTAL HEALTH (3).** Analysis and control of current environmental health problems. Discussion of the effects of environmental factors on human health, and the organization and administration of environmental health programs. CRQ: BIOS 213 or BIOS 313; and CHEM 110 or CHEM 210; and MATH 210 or MATH 211 or MATH 229; or consent of school.

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: Grade of C or better in each of the following courses: PHHE 220, PHHE 300, and three content courses chosen from FCNS 201 or FCNS 405, PHHE 402, PHHE 404, PHHE 406, PHHE 408, PHHE 410, PHHE 412, or PHHE 472, or consent of school. CRQ: PHHE 482.

402. **COMMUNITY HEALTH PROGRAMS AND ISSUES (3).** Provides conceptual tools for understanding community health issues, introduces principles and methods for promoting health, emphasizes community health perspectives based on the multilevel nature of health, discusses development of effective health promotion programs based on interaction and interdependence of factors. PRQ: PHHE 220 or consent of school.

404. **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.

406. **SEXUALITY EDUCATION (3).** Emphasis on understanding values and beliefs concerning sexuality and on developing and implementing educational programs in school and community settings.

408. **MENTAL AND EMOTIONAL HEALTH (3).** Study of personality traits and interpersonal relationships. Emphasis on development and maintenance of positive mental and emotional health.

409X. WATER QUALITY (4). *Crosslisted as BIOS 409X, ENVS 409, and GEOL 409X.* Survey of microbiological and chemical parameters affecting water quality and their associated public health aspects. Topics include microbial detection methods, waterborne disease, organic and inorganic parameters, drinking water, wastewater treatment plants, source water, and risk assessment. Lectures, laboratories, and a field trip. PRQ: CHEM 110 and CHEM 111; or consent of the department.

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.

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.

431. 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: PHHE 315 or PHHE 402.

433. 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.

435. 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.

437. 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.

439. 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.

441. INTRODUCTION TO HEALTH CARE ADMINISTRATION (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.

451. 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: PHHE 295 and ECON 260 or equivalent.

453. 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.

455. PUBLIC HEALTH EPIDEMIOLOGY (3). Principles, concepts, and uses of public health epidemiology. Discussion and application of epidemiological approaches to studying public health problems. CRQ: MATH 210, MATH 211, or MATH 229 with a grade of C or better, and PHHE 325.

461. PUBLIC HEALTH AND THE U.S. HEALTH CARE SYSTEM (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: PHHE 295.

463. PUBLIC HEALTH INFORMATICS (3). Systematic application of information and computer science and technology to public health practice, theory, and research. Information on the various aspects of public health informatics including surveillance, digital literacy, data management, and ethical issues regarding health data. PRQ: PHHE 206 or PHHE 295 or consent of school.

467. PUBLIC HEALTH RESEARCH AND EVALUATION (3). Study of the process and models used in research and evaluation in public health. PRQ: PHHE 295 and PHHE 325.

469. 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 procedures for collecting and interpreting data in public health planning. PRQ: PHHE 467.

472. CURRENT ISSUES: HEALTH EDUCATION (1-3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Consent of school.

473. TOPICS IN PUBLIC HEALTH AND HEALTH EDUCATION (1-3). Examination of contemporary issues and problems in public health and health education. May be repeated to a maximum of 6 semester hours.

481. APPLIED PROFESSIONAL HEALTH SCIENCES (10-25).

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
O. Other appropriate health care area
Clinical application for practicing health care professionals with an Associate of Applied Science degree in an appropriate health care area. PRQ: Consent of school.

482. CLINICAL/FIELD EXPERIENCE IN HEALTH EDUCATION (1-3). 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: PHHE 300 or consent of school. CRQ: PHHE 400.

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 health education educator licensure coordinator. See "Educator Licensure Requirements." S/U grading. PRQ: Pass ILTS Subject Area Test of Content Knowledge in Health Education, complete all major requirements, grade of C or better in each of the following courses: PHHE 220, PHHE 300, PHHE 400, PHHE 402, PHHE 404, PHHE 406, and PHHE 482, minimum cumulative overall GPA of 2.75, or consent of school.

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 health education educator licensure coordinator. See "Educator Licensure Requirements." S/U grading. PRQ: Pass ILTS Subject Area Test of Content Knowledge in Health Education, complete all major requirements, grade of C or better in each of the following courses: PHHE 220, PHHE 300, PHHE 400, PHHE 402, PHHE 404, PHHE 406, and PHHE 482, minimum cumulative overall GPA of 2.75, or consent of school.

487. 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: Consent of school.

489. PRACTICUM IN PUBLIC HEALTH (1-6). Assignments in a health agency under the supervision of an experienced public health professional. Can be repeated up to 6 semester hours. S/U grading. PRQ: PHHE 487 with a grade of C or better and consent of school.

494. INDEPENDENT STUDY IN PUBLIC HEALTH AND HEALTH EDUCATION (1-3). 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 school.

Nursing and Health Studies Faculty

Jan Strom, Ph.D., University of Illinois, Chicago, professor, chair
Maryann Abendroth, Ph.D., University of Florida, assistant professor

Nailya Almagambetova, Ph.D., Syracuse University, assistant professor

Susan Baldwin, Ph.D., Kent State University, assistant professor

Laura Beamer, DNP, Purdue University, assistant professor

Lucy Bilaver, Ph.D., University of Chicago, assistant professor

Derryl Block, Ph.D., University of Pennsylvania, professor

Wendy Bostwick, Ph.D., University of Illinois, Chicago, assistant professor

Karen Brandt, Ph.D., University of Illinois, Chicago, associate professor

Pat Braun, D.Sc., Rocky Mountain University, assistant professor

Catherine Carlson, Ph.D., Indiana University, associate professor

Virginia Cassidy, Ed.D., Northern Illinois University, professor

Jie Chen, Ph.D., University of Cincinnati, assistant professor

James R. Ciesla, Ph.D., University of South Carolina, professor

Sarah Conklin, Ph.D., University of Pennsylvania, professor emeritus

Manja Daniel, Ph.D., Rush University, assistant professor

Carolinda Douglass, Ph.D., RAND Graduate School of Policy Studies, professor

Jennifer Gray, Ph.D., University of Illinois, Chicago, assistant professor

Joanne Haeffele, Ph.D., University of Utah, assistant professor

Lynn Herrmann, Ph.D., University of Illinois, Urbana-Champaign, assistant professor

Judith E. Hertz, Ph.D., University of Texas at Austin, professor

Kari Hickey, Ph.D., Illinois State University, assistant professor

Arlene Keddle, Ph.D., University of Texas, associate professor

Jinsook Kim, Ph.D., University of California-Los Angeles, associate professor

Daniel Klein, Ph.D., Southern Illinois University, associate professor emeritus

Mary Koren, Ph.D., Rush University, associate professor

Nancy LaCursia, Ph.D., Southern Illinois University-Carbondale, assistant professor emeritus

Ayhan Lash, Ph.D., University of Chicago, professor emeritus

Brigid Lusk, Ph.D., University of Illinois, Chicago, professor emeritus

Donna Munroe, Ph.D., University of Southern California, professor

Kathleen Musker, Ph.D., Loyola University, assistant professor

Nancy Oldenburg, Ed.D., Northern Illinois University, associate professor

William A. Oleckno, H.S.D., Indiana University, Distinguished Teaching Professor, emeritus

Christina Papdimitriou, Ph.D., Boston University, associate professor

Donna Plonczynski, Ph.D., University of Illinois, Chicago, associate professor

Julie Robertson, Ed.D., Northern Illinois University, professor emeritus

Jeanette Rossetti, Ed.D., Northern Illinois University, associate professor

Tomoyuki Shibata, Ph.D., University of Miami, assistant professor

College of Liberal Arts and Sciences

Christopher K. McCord, Ph.D., dean
Sue Warrick Doederlein, Ph.D., associate dean
Michael Peddle, Ph.D., associate dean for academic administration
Lesley Rigg, Ph.D., associate dean for research and graduate affairs

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/School Names and Undergraduate Programs Offered

School of Public and Global Affairs (NGOLD, POLS, PSPA)
 See also the Center for Non-Governmental Organization Leadership and Development; the Department of Political Science, and the Department of Public Administration.

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

Environment Sustainability and Energy Institute
 B.A. and B.S. in Environmental Studies

Department of Foreign Languages and Literatures
 B.A. in French
 B.A. in German
 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

Center for Non-Governmental Organization Leadership and Development
 B.A. and B.S. in community leadership and civic engagement

Department of Philosophy
 B.A. and B.S. 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 Public Administration
 (See School of Public and Global Affairs)

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 educator licensure should fulfill the professional education requirements for educator licensure outlined under "Educator Licensure 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 Mathematical Sciences with an emphasis in mathematics education or with an emphasis in actuarial science, and in different divisions of the Department of Communication, the Department of Foreign Languages and Literatures, and the department of Geography. 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 majoring in Meteorology in the Department of Geography may accumulate additional hours beyond the 50-semester-hour maximum in order to complete requirements for the Minor in Geography or Certificate of Undergraduate Study in Geographic Information Systems. Students having questions about this regulation should contact the college's Advising and Counseling Office.

Some courses in the College of Liberal Arts and Sciences indicate that the course may be repeated to a specified maximum number of semester hours. The statement "May be repeated to a maximum of [number] semester hours," means that the semester hours earned both from the initial enrollment and any permitted subsequent enrollments cannot exceed that maximum. Unless otherwise prohibited, enrollments in such a course may take place in any combination of semesters, including multiple enrollments during a single semester.

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.

Grading policy – College Requirement for Multisection Courses

Current university policy stipulates that "Multi-section courses are expected to require similar levels of competence in all sections." To achieve this goal, the policy further states that a "Department and College Curriculum committees shall be responsible for implementing these policies."

In order to assist students in their academic preparation and provide guidance to instructional faculty, a consistent and public statement of competencies should be developed for relevant multisection courses. Departments will determine which courses are to be included in this policy, but may include those multisection

courses that teach clearly defined competencies (including, but not limited to, core competency courses and general education courses). Courses that serve as gateway courses and those that focus on particular skills or content mastery should also be considered. In courses whose stated competencies are required to progress in a sequence, competencies are to be clearly articulated. Departments are encouraged to develop common syllabi, select common texts, and ensure that the overall distribution of grades be reasonably consistent across multiple sections.

Implementation of the policy should fall under the regular due diligence of departmental curriculum committees in their regular evaluation and assessment of relevant courses. While measures of competencies are expected to be evaluated on a regular basis, it is not intended or expected that departments undertake curricular change that requires significant new resources. Departments are encouraged to work with the Office of Assessment Services to determine reasonable and effective mechanisms to meet evaluation needs.

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 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, OR BIOS 357
 *CHEM 210 and *CHEM 212, *CHEM 211 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 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, OR BIOS 357
 *CHEM 210 and *CHEM 212, *CHEM 211 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 103 and *BIOS 105, BIOS 209 and BIOS 211, BIOS 213, OR BIOS 357
 - *CHEM 210 and *CHEM 212, *CHEM 211 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 Requirements 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.

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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

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 and at least 50 of these hours earned at NIU or at other baccalaureate institutions.

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 following this program must also complete at least 50 of the distributive studies hours (humanities, social sciences, sciences) at NIU or other baccalaureate institutions.

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.

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 Classical Studies

Coordinator: Assistant Chair, Department of Foreign Languages and Literatures

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 102¹ - Elementary Latin I and II (3)
FLCL 201, and FLCL 202¹ - Intermediate Latin I and II (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.

ENGL 307 - Selected Readings in Drama (3) (classical focus)

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 381² - Special Studies in Language I (3)

FLST 382² - Special Studies in Language II (3)

FLTR 271² - Literature in Translation (3)

HIST 301 - History of Ancient Greece (3)

HIST 490A - Special Topics in History: Ancient

IDSP 291 - Art and Literature in the Ancient World (3)

PHIL 321 - Ancient Philosophy (3)

POLS 350 - Classical and Medieval Political Theory (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Cognitive Studies

Coordinators: Giovanni Bennardo, Department of Anthropology; Betty Birner, Department of English; Reva Freedman, Department of Computer Science; and Katja Wiemer, Department of Psychology

Cognitive Studies is the study of the mind. A minor in cognitive studies indicates that a student has studied issues such as knowledge acquisition, language, reasoning, and artificial intelligence from an interdisciplinary perspective and using a variety of methods. This degree may be particularly beneficial to students who seek a career in interdisciplinary fields such as cognitive neuroscience, psycholinguistics, artificial intelligence, human factors engineering, educational technology, or related areas within the participating departments.

The departments participating in this minor are Anthropology, Biological Sciences, Communicative Disorders, Computer Science, English, Philosophy, and Psychology.

* 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.

³ When topic is appropriate, with approval of coordinator.

The Cognitive Studies Minor is open to students of any major area leading to a baccalaureate degree. Students should have at least sophomore standing and hold a cumulative GPA of 2.00 or higher. Students who wish to enroll in the minor need to register with one of the program coordinators.

Requirements (18-19)

*ILAS 261 - Language, Mind, and Thought (3)
At least five of the following, from at least three departments (15-16)
AHRS 101 - American Sign Language I (3)
*ANTH 230 - Introduction to Linguistic Anthropology (3)
ANTH 331 - Language and Culture (3)
ANTH 433 - Fundamentals of Cognitive Anthropology (3)
ANTH 435 - Space in Language and Culture (3)
ANTH 438 - Cultural Models: The Language of Culture (3)
ANTH 491³ - Current Topics in Anthropology (3)
ANTH 498³ - Independent Study in Anthropology (1-6)
BIOS 359 - Human Neurobiology (4)
COMD 305 - Language Development (3)
COMD 330 - Neuropathologies of Speech and Language (3)
CSCI 461³ - Techniques of Computer Programming and Algorithmic Processes (3)
CSCI 490B³ - Topics in Computer Science: Artificial Intelligence (3)
CSCI 490K³ - Topics in Computer Science: Programming Languages (3)
CSCI 497³ - Undergraduate Readings in Computer Science (1-3)
ENGL 318 - Language and Linguistics (3)
ENGL 321 - Structure of Modern English (3)
ENGL 432³ - Topics in General Linguistics (3)
ENGL 433 - Discourse Analysis (3)
ENGL 497³ - Directed Study (1-3)
ENGL 497H³ - Honors Directed Study (3)
*PHIL 105 - Critical Reasoning (3)
*PHIL 205 - Symbolic Logic (3)
PHIL 311 - Problems of Knowledge (3)
PHIL 363 - Philosophy of Mind (3)
PHIL 404 - Philosophy of Language (3)
*PSYC 245 - Thinking (3)
PSYC 300 - Introduction to Brain and Behavior (3)
PSYC 345 - Cognitive Psychology (3)
PSYC 400 - Psychology of Language (3)
PSYC 481 - Drugs and Behavior (3)
PSYC 485³ - Individual Study in Psychology (1-3)
PSYC 495³ - Seminar in Special Topics (3)
PSYC 498³ - Honors Independent Study (1-3)

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 Global Studies

Coordinator: Mikel L. Wyckoff, Department of Political Science

The minor in global studies offers students the opportunity to acquire a strong global focus for their program of studies. Such a global focus is important for making students competitive in the increasingly globalized economy and society. The global 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 global studies in commerce, global political studies, global development studies, or global arts studies.

Students taking the global 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 or a globally-focused engaged learning opportunity through an independent study or internship is also strongly encouraged as an option towards satisfying the minor requirements.

Requirements (24)

Foundation Courses (9-12)

Three of the foundation courses need to be from different disciplines (i.e., ANTH, GEOG, POLS, HIST).

Three or four courses from the following

*ANTH 220 - Introduction to Cultural Anthropology (3)
*GEOG 202 - World Regional Geography (3)
*GEOG 204 - Geography of Economic Activities (3)
*HIST 171 - World History II: Problems in the Human Past (3)
*POLS 260 - Introduction to Comparative Politics (3)
*POLS 285 - Introduction to International Relations (3)

Option (12-15)

Four of five courses from one of the following

*Global Commerce Studies*¹

ANTH 363 - Globalization and Corporate Cultures (3)
COMS 454 - Transnational Communication and Media (3)
ECON 330 - International Economics (3)
FINA 470² - International Finance (3)
HIST 486 - Poverty and Progress in Latin America (3)
JOUR 482 - International News Communications (3)
MGMT 487² - Multinational Management (3)
MKTG 367² - Principles of Global Marketing (3)
MKTG 387² - International Study in Marketing (3)
MKTG 467² - Global Marketing Management (3)
POLS 383 - International Political Economy (3)
INTL 301/INTL 401 - Study Abroad Programs (3-6 semester hours with approval of minor coordinator)

Global Politics Studies

ANTH 426 - Political Anthropology (3)
BKST 219 - Introduction to African Studies (3)
COMS 454 - Transnational Communication and Media (3)
GEOG 335X - Migration (3)

* Available for general education credit.

¹ Recommended for business majors.

² See catalog for prerequisites.

³ When topic is appropriate, with approval of coordinator.

GEOG 430 - Population Geography (3)
 HIST 343 - History of Southeast Asia Since ca. 1800 (3)
 HIST 382 - Modern Latin America (3)
 HIST 387 - History of Genocide (3)
 HIST 425 - World War II (3)
 HIST 435 - Stalin and Stalinism (3)
 HIST 441 - African Diaspora (3)
 HIST 469 - The Vietnam War (3)
 HIST 476 - American Foreign Relations to 1914 (3)
 HIST 477 - American Foreign Relations since 1914 (3)
 HIST 482 - Mexico Since 1810 (3)
 HIST 485 - Modern Latin American Revolutions (3)
 JOUR 482 - International News Communications (3)
 POLS 360 - Government and Politics of Western Europe (3)
 POLS 361 - British Government and Politics (3)
 POLS 362 - Politics of Developing Areas (3)
 POLS 368 - Governmental Systems in Africa (3)
 POLS 371 - Politics in Southeast Asia (3)
 POLS 375 - Middle East Politics (3)
 POLS 376 - Political Violence (3)
 POLS 380 - American Foreign Policy (3)
 POLS 383 - International Political Economy (3)
 POLS 386 - Global Terrorism (3)
 POLS 388 - U.S. National Security Policy (3)
 POLS 480 - International Law and Organization (3)
 SEAS 225 - Southeast Asia: Crossroads of the Worlds (3)
 SOCI 352 - Population (3)
 SOCI 335 - Migration (3)
 INTL 301/INTL 401 - Study Abroad Programs (3-6 semester hours
 with approval of minor coordinator)

Global Development Studies

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 467 - Applied Anthropology (3)
 ANTH 468 - Anthropology of Gender (3)
 COMS 454 - Transnational Communication and Media (3)
 ECON 330 - International Economics (3)
 *FCNS 406 - Global Food and Nutrition Issues (3)
 *GEOG 204 - Geography of Economic Activities (3)
 GEOG 332 - Geography of Latin America (3)
 GEOG 338 - Geography of Asia (3)
 GEOG 408 - Tropical Environmental Hazards (3)
 GEOG 430 - Population Geography (3)
 GEOG 451 - Political Geography (3)
 HIST 470 - America and Asia (3)
 HIST 475 - The United States and Southeast Asia and the Indian
 Subcontinent (3)
 HIST 486 - Poverty and Progress in Latin America (3)
 ILAS 444 - Comparative Urbanization (3)
 JOUR 482 - International News Communications (3)
 POLS 362 - Politics of Developing Areas (3)
 POLS 383 - International Political Economy (3)
 SOCI 352 - Population (3)
 INTL 301/INTL 401 - Study Abroad Programs (3-6 semester hours
 with approval of minor coordinator)

Global Arts Studies

*ARTH 294 - Art History Survey IV: Arts of the East (3)
 ENGL 335 - Non-Western and Third-World Literature (3)
 ENGL 474 - The International Short Story (3)
 ENGL 477 - Postcolonial and New Literatures in English (3)
 HIST 352 - Popular Culture in Japan (3)
 HIST 383 - Latin America Through Film (3)
 MUHL 326 - Survey of World Music (3)
 MUHL 431 - Music of Southeast Asia (3)
 MUHL 432 - Music of China (3)
 INTL 301/INTL 401 - Study Abroad Programs (3-6 semester hours
 with approval of minor coordinator)

Minor in Latino/Latin American Studies

Coordinator: Kristin Huffine, acting 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)
 ANTH 469 - Archeology of Empires (3)
 ARTH 380 - Studies in African, Oceanian, Native American, Pre-Columbian Art, and Latin-American Art (3)
 ARTH 458 - Topics in Art History: African, Oceanian, Native-American, Pre-Columbian and Latin-American Art (3)
 ECON 341D - Economic Area Studies: Latin America (3).
 ENGL 381B - American Ethnic Literature: Latina/Latino Literature (3)
 FLPO 461 - Brazilian Civilization (3)
 FLSP 215 - Spanish Grammar for Spanish Speakers (3)
 FLSP 301 - Advanced Spanish Grammar (3)
 FLSP 322 - Masterpieces of Spanish-American Literature (3)
 FLSP 361 - Introduction to Spanish Cultures (3)
 FLSP 362 - Introduction to Spanish American Cultures (3)
 FLSP 380 - Gender and Hispanic Business Practice (3)
 FLSP 439 - Women Authors in Hispanic Literature (3)
 FLSP 440 - Spanish American Poetry and Theater (3)
 FLSP 441 - Spanish American Novel (3)
 FLSP 445 - Latin American Women Writers (3)
 FLSP 452 - Literature of the Caribbean (3)
 FLSP 454 - Mexican Literature (3)
 FLSP 455 - Spanish-American Short Story (3)
 FLSP 456 - Colonial Latin American Literature (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 - Special Topics in Spanish Civilization (3)
 FLSP 462 - Special Topics in Spanish-American Civilization (3)
 FLSP 480 - Introduction to Hispanic Linguistics (3)
 FLSP 482 - Foundations in Spanish Sociolinguistics (3)
 FLSP 487 - Hispanic Dialectology (3)
 GEOG 332 - Geography of Latin America (3)
 GEOG 430 - Population Geography (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 459 - The Atlantic World, 1492-1860s (3)
 HIST 481 - Indigenous Mexico (3)
 HIST 482 - Mexico Since 1810 (3)
 HIST 483 - Africans in Colonial Latin America (3)
 HIST 484 - History of Brazil (3)
 HIST 485 - Modern Latin American Revolutions (3)
 HIST 486 - Poverty and Progress in Latin America (3)
 HIST 487 - The Latin American City (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 - Regional Security (3)
 SOCI 358 - Racial and Ethnic Minority Families (3)
 SOCI 361 - Race and Ethnicity (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in LGBT Studies

Coordinator: Kristen Myers, Director of Women's Studies

The interdisciplinary minor in LGBT Studies is recommended for all students interested in examining historical and contemporary issues related to identity, power, citizenship, and contributions of lesbian, gay, bisexual, and transgendered people. Complex problems surrounding gender and sexuality are explored in depth, in a variety of contexts. Such exploration should broaden students' understanding of current societal expectations for both gay and straight people, 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, sciences, 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 LGBT studies. Independent study and topics courses in a variety of departments may meet the minor requirements, with the approval of the coordinator of the LGBT studies program, when substantial treatment of LGBT studies is included in the course.

Students must complete 18 semester hours for this minor and are urged to complete WOMS 101, LGBT 350, and LGBT 400 as early as possible.

Requirements (18)

LGBT 350 - Lesbian, Gay, Bisexual and Transgender Studies (3)
 WOMS 230 - Women, Sex, and Gender Today (3)
 WOMS 432 - Feminist Theory (3)

Three of the following (9) to be chosen in consultation with the director

ANTH 422 - Gender in Southeast Asia (3)
 ANTH 468 - Anthropology of Gender (3)
 ARTH 451¹ - Topics in Art History: Ancient and Middle-Eastern Art (3)
 COMS 230² - Rhetoric and the Media (3)
 COMS 410 - Communication and Gender (3)
 ENGL 383 - Gay and Lesbian Literature (3)
 ENGL 400¹ - Literary Topics (3)
 ENGL 434X/WOMS 434² - Language and Gender (3)
 HIST 402 - Gender and Sexuality in History (3)
 HIST 413 - Family, Sexuality, and Society since 1400 (3)
 ILAS 390¹ - Internship (3)
 LGBT 351 - Research in Lesbian, Gay, Bisexual, Transgender Studies (3)
 LGBT 450 - Transgender Studies (3)
 LGBT 460 - Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 406 - Sexuality Education (3)
 PHIL 231² - Contemporary Moral Issues (3)
 POLS 320² - Biopolitics and Human Nature (3)
 POLS 414¹ Topics in Law and Social Problems (3)

POLS 495¹ - Seminar in Current Problems (3)
 PSYC 474 - Psychological Basis of Sexuality (3)
 SOCI 357 - The Sociology of Gender (3)
 SOCI 450 - Social Inequality (3)
 SOCI 495¹ - Proseminar in Sociology (3)
 WOMS 332² - Growing Up Female (3)
 WOMS 430¹ - Special Topics in Women's Studies (3)
 WOMS 436¹ - Current Debates Seminar: Women and Gender (3)

Minor in Linguistics

Coordinator: Doris M. Macdonald, 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)

Basic Courses (3-9)

*ANTH 230 - Introduction to Linguistic Anthropology (3),
 OR ENGL 318 - Language and Linguistics (3),
 OR ENGL 321 - Structure of Modern English (3)

Additional Courses (9-16)

AHRS 101- American Sign Language I (3)
 COMD 221 - Phonetics and Phonology (3)
 COMD 305 - Language Development (3)
 COMD 325 - Introduction to Hearing Science (3)
 ANTH 331 - Language and Culture (3)
 ANTH 435/GEOG 435X - Space in Language and Culture (3)
 ANTH 490J - Anthropological Research Training: Linguistic Anthropology (3)
 COMS 404 - Communication Theories (3)
 CSCI 490B - Topics in Computer Science: Artificial Intelligence (3)
 CSCI 490K - Topics in Computer Science: Programming Languages (3)
 CSCI 497 - Undergraduate Readings in Computer Science (3)
 ENGL 320 - History of the English Language (3)
 ENGL 322 - Language in American Society (3)
 ENGL 432 - Topics in General Linguistics (3)
 ENGL 433 - Discourse Analysis (3)
 FLAL 483 - Applied Linguistics and the Romance Languages (3)
 FLBU 103 - Beginning Burmese I (5)
 FLCH 101 - Beginning Chinese I (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)
 FLIN 103 - Beginning Indonesian I (5)
 FLIS 481 - Independent Study in a Foreign Language (1-6)
 FLJA 101 - Beginning Japanese I (3)

* Available for general education credit.

¹ May be counted toward the minor when topic is appropriate.

² If there is significant coverage of sexuality in course.

FLSP 301 - Advanced Spanish Grammar (3)
 FLSP 302 - Advanced Composition in Spanish (3)
 FLSP 481 - Spanish Phonology (3)
 FLST 181 - Elementary Language Instruction I (1-5)
 FLST 483 - Special Topics in Linguistics (3)
 FLTA 103 - Beginning Tagalog I (5)
 FLTH 103 - Beginning Thai I (5)
 *ILAS 261 - Language, Mind, and Thought (3)
 *PHIL 205 - Symbolic Logic (3)
 PHIL 404 - Philosophy of Language (3)
 PSYC 345 - Cognitive Psychology (3)
 PSYC 400 - The Psychology of Language (3)
 WOMS 434/ENGL 434X - Language and Gender (3)
 Any one continuation course of the beginning non-Indo-European language courses (AHRS 101, FLBU 103, FLCH 101, FLIN 103, FLJA 101, FLTH 103) or any 200-level non-Indo-European language course.

Six or more semester hours in the minor must be taken at NIU.

Minor in Professional 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 minor in professional communication offers majors in fields other than communication studies and English the opportunity to develop communication skills that are valued in the typical workplace environment. Courses focus on the theory and practice of composition and design of both electronic and paper-based professional documents, and on the theory and practice of mediated and face to face interaction. The minor is recommended to students in both technical and non-technical fields.

Requirements (18)

COMS 361 - Business and Professional Communication (3)

Two of the following (6)

- COMS 200 - Advanced Public Speaking (3)
- COMS 300 - Speech Writing (3)
- COMS 302 - Introduction to Organizational Communication Theory (3)
- COMS 303 - Introduction to Interpersonal Communication Theory (3)
- COMS 305 - Argumentation and Debate (3)
- COMS 309 - Performance in Speech Communication (3)
- COMS 355 - Media Writing (3)
- COMS 446 - Designing for the Internet (3)
- COMS 480 - Communication and Conflict Management (3)
- JOUR 200A - Basic News Writing (3)
- JOUR 312 - Graphics of Communications (3)
- JOUR 492 - Internship in Journalism (3)

Three of the following, including ENGL 308 and/or ENGL 403 (9)

- ENGL 207 - Fundamentals of English Grammar (3)
- ENGL 300A - Advanced Essay Composition: General (3)
- ENGL 303 - Writing Creative Nonfiction (3)
- ENGL 304 - Writing Arts Criticism (3)
- ENGL 308 - Technical Writing (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 434X - Language and Gender (3)
- ENGL 496 - Internship in Writing, Editing, or Training (1-6)

Six or more semester hours in the minor must be taken at NIU.

Minor in Southeast Asian Studies

Coordinator: Judy Ledgerwood, 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; 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 family, consumer, and nutrition sciences.

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 (19-21)

Students must include 10 semester hours of an intensively taught Southeast Asian language² (Burmese, Indonesian, Khmer, Malay, 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 328¹ - Anthropology of Religion (3)
- ANTH 363¹ - Globalization and Corporate Cultures (3)
- ANTH 407 - Peoples and Cultures of Insular Southeast Asia (3)
- ANTH 408 - Peoples and Cultures of Mainland Southeast Asia (3)
- ANTH 421 - Social Organization (3)
- ANTH 422 - Gender in Southeast Asia (3)
- ANTH 426 - Political Anthropology (3)
- ANTH 428¹ - Ritual and Myth (3)
- ANTH 462 - Museum Methods (3)
- ANTH 491¹ - Current Topics in Anthropology (3)
- ANTH 493¹ - Anthropology Field Study (1-6)
- ANTH 498² - Independent Study in Anthropology (1-6)
- ARTH 370¹ - Studies in Asian Art: India and Southeast Asia (3)
- ARTH 457 - Topics in Art History: Asian Art (3)
- FCNS 384 - Asian American Families (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 I and II (5, 5)
- FLIN 203, FLIN 204 - Intermediate Indonesian I and II (5, 5)
- FLIN 421 - Introduction to Indonesian Literature (3)
- FLIS 481¹ - Independent Study in a Foreign Language (3)
- FLST 181¹ - Elementary Language Instruction I (1-5)
- FLST 182¹ - Elementary Language Instruction II (1-5)
- FLST 381¹, FLST 382¹ - Special Studies in Language I and II (3, 3)
- FLST 481¹, FLST 482¹ - Special Topics in Literature I and II (3, 3)
- FLST 483¹ - 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 I and II (5, 5)

* Available for general education credit.

¹ May be counted toward the minor when topic is appropriate.

² 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.

FLTH 203, FLTH 204 - Intermediate Thai I and II (5, 5)
 GEOG 338¹ - Geography of Asia (3)
 GEOG 390¹ - Topics in Geography (1-3)
 GEOG 408¹ - Tropical Environmental Hazards (3)
 GEOG 491¹ - Undergraduate Research in Geography (1-3)
 GEOG 498C¹ - Seminar in Current Problems: Meteorology/
 Climatology (3)
 HIST 342 - History of Southeast Asia to ca. 1800 (3)
 HIST 343 - History of Southeast Asia Since ca. 1800 (3)
 HIST 346¹ - Women in Asian History (3)
 HIST 387¹ - History of Genocide (3)
 HIST 442 - History of Buddhist Southeast Asia (3)
 HIST 443 - History of Islamic Southeast Asia (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 493¹ - Honors Independent Study (1-3)
 HIST 490J¹ - Special Topics in History: Asian (3)
 HIST 493¹ - Independent Study (1-4)
 JOUR 482¹ - International News Communications (3)
 MUHL 431 - Music of Southeast Asia (3)
 MUSE 370 - Gamelan (1)
 POLS 362¹ - Politics of Developing Areas (3)
 POLS 365 - Origins of Political Order (3)
 POLS 371 - Politics in Southeast Asia (3)
 POLS 376¹ - Political Violence (3)
 POLS 384¹ - Contemporary Foreign Policy (3)
 POLS 395¹ - Contemporary Topics in Political Science (3)
 POLS 495¹ - Seminar in Current Problems (3)
 POLS 496¹ - Independent Study in Political Science (1-6)
 *SEAS 225 - Southeast Asia: Crossroads of the World (3)
 SEAS 490² - Advanced Topics in Interdisciplinary Studies (3)

Six or more semester hours in the minor must be taken at NIU.

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 463 - Urban Geography (3)
 POLS 303 - State and Local Government (3),
 OR PSPA 303X - State and Local Government (3),
 Four courses chosen from at least two departments outside of the
 major department (12)
 ECON 454 - State and Local Finance (3)
 ECON 485 - Urban Economic Problems and Policies (3)
 GEOG 304 - Transportation Geography (3)
 GEOG 362 - Geography of Urban Systems (3)
 GEOG 455 - Land-Use Planning (3)
 HIST 368 - The History of Chicago (3)

ILAS 444 - Comparative Urbanization (3)
 POLS 302 - Government in Metropolitan Areas (3),
 OR PSPA 302X - Government in Metropolitan Areas (3)
 POLS 326 - Nonprofit Management (3),
 OR PSPA 326X - Nonprofit Management (3)
 POLS 331 - Public Administration (3),
 OR PSPA 331X - Public Administration (3)
 SOCI 352 - Population (3)
 SOCI 361 - Race and Ethnicity (3)
 SOCI 441 - The Urban Community (3)
 SOCI 459 - Political Sociology (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Women's Studies

Coordinator: Kristen Myers, 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, Sex, and Gender Today (3)
 *WOMS 235 - Women Across Cultures and Centuries (3)
 WOMS 432 - Feminist Theory (3)
 Three of the following (9)
 ANTH 361 - Cross-Cultural Perspectives on Women (3)
 ANTH 422 - Gender in Southeast Asia (3)
 ANTH 441 - Sex and Gender in Primates (3)
 ANTH 468 - Anthropology of Gender (3)
 ARTH 485D - Topics in Art History: Images of Women (3)
 BIOS 324X - Women in Science (3)
 BKST 402 - The Africana Woman (3)
 *COMS 410 - Communication and Gender (3)
 ENGL 298¹ - Topics in Literature (3),
 OR ENGL 381¹ - American Ethnic Literature (3),
 OR ENGL 399H¹ - Topics in American Literature: Honors (3),
 OR ENGL 400¹ - Literary Topics (3),
 OR ENGL 499H¹ - Topics in English Literature: Honors (3)

* Available for general education credit.

¹ May be counted toward the minor when topic is appropriate.

ENGL 382 - Women Writers: The Tradition in English (3)
 ENGL 383 - Gay and Lesbian Literature (3)
 ENGL 434X - Language and Gender (3)
 FCNS 384 - Asian American Families (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 380 - Gender and Hispanic Business Practices (3)
 FLSP 439 - Women Authors in Hispanic Literature (3)
 FLSP 445 - Latin American Women Writers (3)
 FLST 481¹ - Special Topics in Literature I (3)
 GEOG 324X - Women in Science (3)
 HIST 322 - Women in Modern Europe (3)
 HIST 346 - Women in Asian History (3)
 HIST 353 - Women in African History (3)
 HIST 369 - Women in United States History (3)
 HIST 402 - Gender and Sexuality in History (3)
 HIST 407 - Medieval Women (3)
 HIST 413 - Family, Sexuality, and Society Since 1400 (3)
 HIST 473 - Topics in Women's History (3)
 LGBT 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
 LGBT 450 - Transgender Studies (3)
 LGBT 460² - Special Topics in LGBT Studies (3)
 MGMT 498 - Equal Opportunity and Employment (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 406 - Sexuality Education (3)
 PHIL 355 - Feminism and Philosophy (3)
 POLS 373 - Women and Politics (3)
 POLS 411 - Constitutional Law II (3)
 PSYC 424 - Adolescent Development (3)
 PSYC 474 - Psychological Basis of Sexuality (3)
 SOCI 354 - Families and Social Change (3)
 SOCI 356 - Health, Aging, and Society (3)
 SOCI 357 - The Sociology of Gender (3)
 SOCI 358 - Racial and Ethnic Minority Families (3)
 SOCI 450 - Social Inequality (3)
 SOCI 487 - Gender and Crime (3)
 WOMS 240 - Issues in Women's Studies (3)
 WOMS 324 - Women in Science (3)
 WOMS 332 - Growing Up Female (3)
 WOMS 390 - Internship in Women's Studies (1-3)
 WOMS 424 - Topics in Gender and STEM (3)
 WOMS 430 - Special Topics in Women's Studies (3)
 WOMS 434 - Language and Gender (3)
 WOMS 436 - Current Debates Seminar: Women and Gender (3)
 WOMS 439 - Independent Study in Women's Studies (3)

Six or more semester hours in the minor must be taken at NIU.

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)

ENGL 320 - History of the English Literature (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 304 - Late Antiquity and the Fall of Rome (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 407 - Medieval Women (3)
 HIST 408 - Medieval Everyday Life (3)
 HIST 420 - The Renaissance (3)
 HIST 490B - Special Topics in History: Medieval (3)
 MATH 304 - History of Mathematics Through the 17th Century (3)
 MUHL 321 - History and Literature of Music I (3)
 PHIL 321 - Ancient Philosophy (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

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 378, 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 378 - Asian-American History (3)

Two of the following

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)
 ENGL 335¹ - Non-Western and Third-World Literature (3)
 ENGL 381¹ - American Ethnic Literature (3)
 GEOG 338 - Geography of Asia (3)
 HIST 346 - Women in Asian History (3)
 POLS 371 - Politics in Southeast Asia (3)
 POLS 372 - Politics of China, Japan, and Korea (3)
 SEAS 225 - Southeast Asia: Crossroads of the World (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)

* 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.

Lesbian, Gay, Bisexual, and Transgender Studies (12)

Coordinator: Kristen Myers (Women's Studies Program)

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

LGBT 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)

Three of the following (9)

- ANTH 422 - Gender in Southeast Asian (3)
- 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 400¹ - Literary Topics (3)
- HIST 402 - Gender and Sexuality in History (3)
- LGBT 351 - Research in Lesbian, Gay, Bisexual, Transgender Studies (3)
- LGBT 390¹ - Internship (3)
- PHHE 306 - Human Sexuality (3)
- PHHE 406 - Sexuality Education (3)
- PSYC 474 - Psychological Basis of Sexuality (3)
- SOCI 357 - Sociology of Gender (3)
- WOMS 230 - Women in Contemporary America (3)
- WOMS 235 - Women Across Cultures and Centuries (3)
- WOMS 430¹ - Special Topics in Women's Studies (3)
- WOMS 432 - Feminist Theory (3)

Religious Studies (15)

Coordinator: Shane Sharp (Department of Sociology)

This certificate is designed to provide students with an understanding of the interdisciplinary academic study of religious phenomena from around the globe. It is recommended for all students interested in examining the religious belief systems of the world as well as issues associated with the patterns, correlates, and explanations of religious beliefs and practices. The certificate program is open to all NIU undergraduates. Students must maintain good academic standing in the university and complete all certificate course work within six calendar years.

All students attempting to obtain a Religious Studies certificate must take ILAS 170, World Religions. ILAS 170 is the core course in the certificate; ideally it should be taken prior to registering for other course work in the certificate. A working knowledge of the beliefs and practices of major world religions will help students succeed in upper-level courses in the certificate program.

In addition to taking ILAS 170, students must take at least one (1) course from the following main areas: 1) Humanistic Study of Religion, 2) Social Scientific Study of Religion, and 3) Artistic

Study of Religion. The other course to fulfill the requirement for the certificate will be at the discretion of the student. Students will be required to take at least one course in all three areas so that they will be exposed to the interdisciplinary nature of the field of Religious Studies and because this reflects the course requirements for Religious Studies majors at other accredited colleges and universities.

General Study of Religion

ILAS 170 - World Religions (3)

Humanistic Study of Religion

Must take at least one of the following:

- ENGL 340 - The Bible as Literature (3)
- ENGL 409 - Milton (3)
- FLCL 271 - Classical Mythology (3)
- HIST 140 - Asia to 1500 (3)
- HIST 319 - The Early Islamic World (3)
- HIST 340 - Ancient India (3)
- HIST 342 - History of Southeast Asia to ca. 1800 (3)
- HIST 344 - History of Ancient China (3)
- HIST 348 - African History to 1600 (3)
- HIST 364 - Religion in American to 1865 (3)
- HIST 365 - Religion in American since 1865 (3)
- HIST 370 - Introduction to American Indian History (3)
- HIST 414 - European Wars of Religion, 1520-1660 (3)
- HIST 421 - The Catholic and Protestant Reformations (3)
- HIST 440 - Islam and Colonialism in Africa (3)
- HIST 442 - History of Buddhist Southeast Asia (3)
- HIST 443 - History of Islamic Southeast Asia (3)
- PHIL 370 - Philosophy of Religion (3)

Social Scientific Study of Religion

Must take at least one of the following:

- ANTH 304 - Muslim Cultures in Anthropological Perspective (3)
- ANTH 328 - Anthropology of Religion (3)
- ANTH 428 - Ritual and Myth (3)
- POLS 358 - Religion and the Constitution (3)
- POLS 378 - Political Islam (3)
- SOCI 355 - Sociology of Religion (3)

Artistic Study of Religion

Must take at least one of the following:

- ARTH 310 - Studies in Ancient and Middle Eastern Art (3)
- ARTH 320 - Studies in Medieval Art (3)
- ARTH 330 - Studies in Early Modern European Art (3)
- ARTH 370 - Studies in Asian Art (3)
- ARTH 380 - Studies in African, Oceanian, Native American, Pre-Columbian Art, and Latin-American Art. (3)

Women and Gender Studies

Coordinator: Kristen Myers (Women's Studies Program)

This certificate is designed for students interested in examining issues of historical and contemporary gender inequality, both within the U.S. and abroad. Students will be able to critically assess the ways that gender has been used to constrain people's opportunities as well as ways that it has been harnessed as a tool for change. The certificate will help students function as informed citizens and successful professionals in the 21st century. Course material will increase students' sensitivity and effectiveness 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 Women's Studies for approval of the course of study.

¹ May be counted toward the certificate when topic is appropriate.

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 Director of Women's Studies.

Requirements

WOMS 230 - Women, Sex, and Gender Today (3)
 WOMS 235 - Women and Cultural Expression across Cultures and Centuries (3)
 LGBT 350 - Lesbian, Gay, Bisexual, and Transgender Studies (3)
 WOMS 432 - Feminist Theory (3)
 Two of the following courses in any field, focused on women and/or gender, to be selected in consultation with the director of the Women's Studies Program.
 ANTH 361 - Cross-Cultural Perspectives on Women (3)
 ANTH 422 - Gender in Southeast Asia (3)
 ANTH 441 - Sex and Gender in Primates (3)
 ANTH 468 - Anthropology of Gender (3)
 BIOS 324X/GEOG 324X/WOMS 324 - Women in Science (3)
 *COMS 410 - Communication and Gender (3)
 ENGL 298¹ - Topics in Literature (3)
 OR ENGL 381¹ - American Ethnic Literature (3)
 OR ENGL 399¹ - Topics in American Literature (3)
 OR ENGL 400¹ - Literary Topics (3)
 OR ENGL 499¹ - Topics in English Literature (3)
 ENGL 382 - Women Writers: The Tradition in English (3)
 ENGL 383 - Gay and Lesbian Literature (3)
 ENGL 434X/WOMS 434 - Language and Gender (3)
 FLFR 445 - French Women Writers (3)
 FLSP 380 - Gender and Hispanic Business Practices (3)
 FLSP 439 - Women Authors in Hispanic Literature (3)
 FLSP 445 - Latin American Women Writers (3)
 FLST 481¹ - 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 369 - Women in United States History (3)
 HIST 402 - Gender and Sexuality in History (3)
 HIST 407 - Medieval Women (3)
 HIST 413 - Family, Sexuality, and Society since 1400 (3)
 HIST 473 - Topics in Women's History (3)
 PHHE 306 - Human Sexuality (3)
 PHHE 406 - Sexuality Education (3)
 PHIL 355 - Feminism and Philosophy (3)
 POLS 373 - Women and Politics (3)
 POLS 411 - Constitutional Law II (3)
 PSYC 424 - Adolescent Development (3)
 PSYC 474 - Psychological Basis of Sexuality (3)
 SOCI 354 - Families and Social Change (3)
 SOCI 356 - Health, Aging, and Society (3)
 SOCI 357 - The Sociology of Gender (3)
 SOCI 358 - Racial and Ethnic Minority Families (3)
 SOCI 450 - Social Inequality (3)
 SOCI 487 - Gender and Crime (3)
 WOMS 240 - Issues in Women's Studies (3)
 WOMS 324 - Women in Science (3)
 WOMS 332 - Growing Up Female (3)
 WOMS 390 - Internship in Women's Studies (1-3)
 WOMS 424 - Topics in Gender and STEM (3)
 WOMS 430 - Special Topics in Women's Studies (3)
 WOMS 436 - Current Debates Seminar: Women and Gender (3)
 WOMS 439 - Independent Study in Women's Studies (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.

¹ May be counted toward the certificate when topic is appropriate.

Degree Affiliation Agreement NIU/UIC College of Pharmacy—Guaranteed Admission Program

The University of Illinois College of Pharmacy will admit 10 students from NIU who meet the following conditions prior to matriculation:

Conditions of Affiliation Program Admission:

Completion of a minimum of 3 full-time semesters of university course work at NIU, with at least 4 semesters of course work remaining in their program. Preference will be given to students who have completed some pre-pharmacy course work.

Minimum GPA of 3.50/4.00 (cumulative) at NIU.

Successful completion of an on-site interview (UIC campus).

Expressed interest in the profession of pharmacy/healthcare as demonstrated by work or volunteer activities.

Involvement in extracurricular activities at the collegiate level.

Conditions for retention and matriculation:

Baccalaureate degree from NIU within 5 years.

Minimum cumulative pre-pharmacy GPA of 3.50/4.00, checked each semester.

Completion of all pre-pharmacy course work at NIU.

Receive a grade of C or better in every prerequisite course. [Courses in which a grade below C is obtained must be retaken. Both grades will be used in the GPA calculation.]

Attend meetings every semester with the program contact at NIU.

Participation in a portfolio project assigned by UIC.

Take the Pharmacy College Admission Test (PCAT).

Students given a guaranteed spot at UIC will be asked for their campus preference (Chicago or Rockford) at the time of matriculation; these preferences will be honored.

For additional information regarding the program at NIU, contact the Advising and Counseling Office at the beginning of the first semester of enrollment at NIU.

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 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.

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 (3), and
ACCY 207 - Introductory Cost Management (3),
OR ACCY 288 - Fundamentals of Accounting (3)

COMS 304 - Introduction to Persuasion Theory (3),
OR COMS 305 - Argumentation and Debate (3)

ECON 260 - Principles of Microeconomics (3)

ECON 261 - Principles of Macroeconomics (3)

ENGL 300 - Advanced Essay Composition (3) (special sections designated for pre-law)

HIST 478 - American Legal History to 1865 (3)

HIST 479 - American Legal History since 1865 (3)

MGMT 217 - Legal Environment of Business (3)

MGMT 438 - Human Resource Planning and Staffing (3)

PHIL 105 - Critical Reasoning (3)

PHIL 231 - Contemporary Moral Issues (3)

PHIL 353 - Philosophy of Law (3)

POLS 356 - American Political Thought I (3)

POLS 410 - Constitutional Law I (3)

POLS 411 - Constitutional Law II (3)

POLS 412 - Constitutional Law III (3)

Course Selection for Biomedical Pre-professional Students

In addition to the courses required of all students gaining a B.S. degree, the following courses are recommended for students pursuing a biomedical pre-professional program. Specific requirements can vary from school to school, so students should also contact the specific schools to which they intend to apply as they plan their undergraduate program. It is important for pre-professional students to consult with the pre-professional adviser early in their first semester of enrollment at NIU to formulate a plan that takes into account the individual student's background and goals. Beyond the courses listed below, it will be important for students to gain experience outside the classroom through laboratory research, student organizations, volunteer activities, and exposure to their chosen biomedical profession.

Math: Trigonometry and Elementary Functions (MATH 155) and Calculus I (MATH 229)
 Chemistry: General Chemistry I and II with labs (CHEM 210/212 and CHEM 211/213)
 Organic Chemistry I and II with labs (CHEM 330/332 and CHEM 331/333)
 Physics: General Physics I and II (PHYS 210 and 211)
 Fundamentals of Physics I and II (PHYS 253 and PHYS 273)
 Biology: Fundamentals of Biology I and II with labs (BIOS 208/BIOS 210 and BIOS 209/BIOS 211), Molecular Biology (BIOS 302), Microbiology (BIOS 313), and Human Physiology (BIOS 355)
 Additional recommended classes include Statistics (STAT 301), Biological Chemistry (CHEM 470 or CHEM 472 and CHEM 473), and Genetics (BIOS 308).

Beyond this core, which will meet most professional school requirements and prepare students for the professional school entrance exams (e.g., MCAT, PCAT, DAT, OAT), individual biomedical programs may also have unique requirements. These include:

Pre-dentistry

Most dental schools require PSYC 102, PYSC 225, STAT 301, and two semesters of English composition.

Pre-medicine

Additional classes in sociology and psychology are recommended and these include PSYC 102, and classes in social, cognitive, and abnormal psychology. Additional useful classes for MCAT preparation include Cellular Physiology (BIOS 465) and Immunobiology (BIOS 440).

Pre-optometry

Many optometry schools require Elementary Statistics - STAT 301 and Lifespan Development - PSYC 225.

Pre-pharmacy

Most pharmacy programs require an economics class (ECON 260) and an anatomy class (BIOS 311 or BIOS 357). NIU also maintains an affiliation program with the UIC College of Pharmacy that will guarantee admissions to highly qualified students. Consult the pre-professional adviser for details on this program.

Pre-veterinary Medicine

Many veterinary programs require one semester of animal science. Applied animal science classes are not offered at NIU, but can typically be taken at a community college over the summer. Most veterinary programs have biological chemistry as a requirement (CHEM 472 and CHEM 473).

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

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 Chinese, French, German, Japanese, 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.

Interdisciplinary Courses Offered by the College of Liberal Arts and Sciences

Inter-Liberal Arts and Sciences (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.

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.

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.

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.

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 40 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.

250. EXTERNAL EDUCATION (3-30). 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.

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.

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.

300. DISCIPLINE-BASED CLINICAL EXPERIENCES FOR THE ILLINOIS STANDARD HIGH SCHOOL LICENSURE (1-3). Discipline-based clinical experiences for students admitted to educator licensure 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 licensure program and of College of Liberal Arts and Sciences coordinator of educator licensure.

301. SECOND CLINICAL EXPERIENCE (2). Discipline-based early clinical experiences for prospective middle/junior and senior high school teachers. Focuses on the practical application of theories of adolescent learning, developmental stages of reading, stages of English language acquisition, and differentiated instruction. Includes a minimum of 50 clock hours of supervised and formally evaluated participation in middle school and high school instructional settings, and seminars on topics such as lesson planning, assessment and evaluation, diversity, middle school theory and curriculum, reading in the content area, teaching English language learners, and other current educational issues. S/U grading. PRQ: Consent of discipline department.

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.

342. GENRE STUDIES IN COMPARATIVE LITERATURE (3). Study in two or more national literatures of epic, drama, novel, short fiction, pastoral, or romance.

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.

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.

399. TOPICS IN LIBERAL ARTS AND SCIENCES (3). Varied honors topics in the Liberal Arts and Sciences that are interdisciplinary in nature or can be fruitfully approached from multiple disciplinary perspectives. May be repeated to a maximum of 6 semester hours as the topic varies.

401. THIRD CLINICAL EXPERIENCE (1-2).

- 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.

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.

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.

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.

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.

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.

440. INDEPENDENT STUDY (1-3). 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.

444. COMPARATIVE URBANIZATION (3). Cross-cultural and interdisciplinary analysis of urbanization focusing on selected developing areas and the United States. Topics include cross-cultural definitions of urbanism, functions and services of secondary cities, and cross-cultural comparison of problems associated with urban growth and rural developments. PRQ: Junior or senior standing.

494X. WRITING CENTER PRACTICUM (1-3). *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. S/U grading. May be repeated to a maximum of 3 semester hours with consent of department.

Lesbian, Gay, Bisexual, and Transgender Studies (LGBT)

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.

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.

390. INTERNSHIP (3). Work as an intern in activities related to LGBT issues, or with organizations that serve the LGBT community. Reading and paper preparation under supervision of a faculty member in the College of Liberal Arts and Sciences. May be repeated to a maximum of 6 semester hours. S/U grading.

450. TRANSGENDER STUDIES (3). Examines the T in LGBT Studies from an interdisciplinary framework, addressing multiple issues including trans identities, bodies, and rights.

460. SPECIAL TOPICS IN LGBT STUDIES (3). Special problems, methods, or applications related to LGBT issues. May be repeated to a maximum of 6 semester hours when topic varies.

Southeast Asian Studies (SEAS)

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.

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.

Women's Studies (WOMS)

230. WOMEN, SEX, AND GENDER TODAY (3). Critical examination and multidisciplinary analysis of gender norms, gender roles, and women's experiences and status in contemporary U.S. society with attention to race, ethnicity, class, and sexual orientation.

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.

240. ISSUES IN WOMEN'S STUDIES (3). Interdisciplinary introduction to selected problems and issues in women's studies. May be repeated to a maximum of 6 semester hours as topic changes.

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.

332. GROWING UP FEMALE (3). Examination of the experience of growing up female 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. PRQ: At least sophomore standing; ANTH 361, SOCI 357, WOMS 230, or WOMS 235; or consent of department.

390. INTERNSHIP IN WOMEN'S STUDIES (1-3). Work as an intern in activities related to women's studies. Reading and paper preparation under supervision of a faculty member. May be repeated in subsequent semesters to a maximum of 6 semester hours. S/U grading. PRQ: Junior or senior standing and consent of director.¹

424. TOPICS IN GENDER AND STEM (3). Selected issues and topics pertaining to gender and science, technology, engineering, and mathematics; how gender and sexuality are defined by and define these fields; contributions of women to scientific developments.

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.

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.

434. LANGUAGE AND GENDER (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.

436. CURRENT DEBATES SEMINAR: WOMEN AND GENDER (3). Examination of issues in contemporary politics, culture, and society related to women and gender from an interdisciplinary perspective. May be repeated to a maximum of 6 semester hours as topic changes. PRQ: Junior or senior standing or consent of director.

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. May be repeated in subsequent semesters only. PRQ: 9 semester hours in the minor, including WOMS 230 and WOMS 235.¹

¹ Complete proposals must be submitted for the program director's approval a minimum of two weeks before classes begin. Proposal forms are available from the Women's Studies office and web site.

School of Public and Global Affairs

The School of Public and Global Affairs spans academic boundaries within the university to foster interdisciplinary programs and collaborative relationships among students, staff, and faculty throughout Northern Illinois University. Membership in the school includes the Department of Political Science (POLS), Department of Public Administration (PSPA), the Non-Governmental Leadership and Development Center (NGOLD) (see also those individual sections in the catalog), and individual memberships, especially faculty engaged with specific interdisciplinary degree programs.

The school is focused on the interdisciplinary nature of governance problems and issues with an emphasis on public, private, and nonprofit collaborative relationships that seek to improve communities and individuals in the United States and around the world. The school fosters and supports collaboration by member units and individuals to address public affairs challenges with interdisciplinary curricula, scholarship, training, and professional and public services with a local, national, and global perspective. The school supports the degrees, minors, and certificates offered by member units.

Minor in Public Administration

Coordination: Liberal Arts and Sciences Advising and Counseling Office and the Departments of Political Science and Public Administration

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),

OR PSPA 331X - Public Administration (3)

*SOCI 170 - Introduction to Sociology (3)

SOCI 375 - Sociology of Organizations (3)

One of the following (3-4) (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.)

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),

OR PSPA 330X - Bureaucracy and the Public Policy Process (3)

PSYC 472 - Group Processes (3)

Six or more semester hours in the minor must be taken at NIU.

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 licensure 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.)

The student learning outcomes for this degree are located at <http://www.niu.edu/assessment/clearinghouse/outcomes/index.shtml>.

Requirements in Department (36-37)

ANTH 210 - Exploring Archaeology (3)

ANTH 220 - Introduction to Cultural Anthropology (3)

ANTH 230 - Introduction to Linguistic Anthropology (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.

Professional Educator Licensure – Social Sciences: Anthropology

Students who want to be licensed to teach anthropology at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in anthropology.

Admission

Students are admitted to the licensure History and Social Sciences Secondary Teacher Education Program when they have

established a file with the History and Social Sciences Secondary Teacher Education Program 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;

passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

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;

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

obtained approval from the History and Social Sciences Secondary Teacher Education Program.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program.

Department Requirements

Students must complete the requirements for a degree in anthropology. In addition, they must complete ANTH 496X, History and Social Science Instruction for Secondary Educators. 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History & Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

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 - Introduction to Linguistic Anthropology (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). A survey 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 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 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. INTRODUCTION TO LINGUISTIC ANTHROPOLOGY (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, biological variation among human populations, 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.

313. ARCHAEOLOGY THROUGH FICTION (3). Introduction to ancient world cultures, including Egypt, the Middle East, Rome, Europe, and North America through novels that use archaeological data and characters. Topics include assessing the accuracy of data, borrowing from scholarly literature, and connections to current controversies over looting, site destruction, and the faking of antiquities.

326X. SURVEY OF WORLD MUSIC (3). *Crosslisted as MUHL 326*. Survey of traditional music (both folk and classical/court) in world cultures. Examination of the relationship of music to selected aspects of the peoples and cultures of East, South, Central, and Southeast Asia, Australia, Polynesia, the Middle East, Europe, Africa, the Caribbean, and Latin America. PRQ: Junior standing or consent of school. There is no prerequisite for musical ability.

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.

329. ANTHROPOLOGY AND CONTEMPORARY WORLD PROBLEMS (3). Examination of selected contemporary world problems such as hunger and food systems, population, inequality, colonialism and underdevelopment, human conflict, environmental degradation, the challenges of indigenous peoples and peasants, and globalization. Application of a deep temporal cultural evolutionary context and a broad cross-cultural framework to the study of contemporary world problems not inherent to the human condition.

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. PRQ: ANTH 230 or consent of department.

341. PRIMATOLOGY (3). *Crosslisted as BIOS 341X*. Study of living nonhuman primates. Topics include primate taxonomy, behavior, natural history traits, ecology, reproduction, feeding and locomotor adaptations, and anatomy. 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.

343. EXTINCTION: WHERE THE WILD THINGS WERE (3). *Crosslisted as ENVS 343X*. Examination of the processes of natural selection, genetic drift, the formation of new species, and extinction. Review of natural extinction events due to environmental change as well as human-induced extinctions of prehistoric, historic and modern species.

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.

363. GLOBALIZATION AND CORPORATE CULTURES (3). Broad overview of anthropological perspectives on development, globalization, 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.

391. DOMESTICATING THE PLANET (3). Examines the critical problems of human interactions with their environment, such as climate change, resource intensification and depletion, resource conflict, disasters, and demographic impacts on the environment using a conceptual background in human ecology and cultural evolution. PRQ: Departmental or University Honors Student.

401X. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ECON 401X, GEOG 401X, HIST 401, POLS 401X, PSYC 401X, and SOCI 401X*. Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

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.

404. PEOPLES AND CULTURES OF THE CARRIBEAN (3). A holistic view of the Caribbean region examining scholars and outsiders' representations. Topics include slavery and its impacts on racial/ethnic identities and categories, economies, food production, trade and the region's rich and diverse expressive culture. Contemporary socio-political and economic aspects are discussed.

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 contact with people from other continents. 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. APPLIED ARCHAEOLOGY (3). Detailed examination of the operational framework, methods, and techniques of applied archaeology and scrutiny of their rationales. Instruction in the skills needed in the working environment of most of the archaeology that is done within the United States.

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. PRQ: ANTH 210 or consent of department.

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.

423. ENVIRONMENTAL ANTHROPOLOGY OF THE MIDDLE EAST: CULTURAL AND POLITICAL ECOLOGIES (3). Anthropological approaches to humans in their environments, particularly cultural ecology and political ecology, to examine the Middle East and North Africa. Study of the particular political systems, livelihoods, landscapes, and belief systems that have developed there.

425. ENVIRONMENT AND ANTHROPOLOGY (3). Human adaptation to the natural environment, including interconnections between ideologies, social systems, economics, political structures, and ecology. Historical development of environmental studies in anthropology, particularly ecological anthropology, up through and including the emergence of political ecology and environmental anthropology. Topics include ecological adaptation of non-industrial societies, communal resources, world food and population, industrial food systems, contemporary environmentalism, and the relationship between science, policy and the state. PRQ: ANTH 220 or consent of the department.

426. POLITICAL ANTHROPOLOGY (3). An examination of politics and dynamically interactive power relations between global, regional, national and local cultural contexts. Discussion of how power relations are an aspect of all institutions and social relationships within a society. Presentation of on politics and power. 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 sociopolitical systems. PRQ: ANTH 220 or consent of department.

429X. INTERNATIONAL NGOS AND GLOBALIZATION (3). *Crosslisted as CLCE 429 and SOCI 329X.* Review of the history of international nongovernmental organizations (INGOs), particularly changes since the advent of neoliberal globalization beginning in the late 1980s that heralded an "NGO boom." Examination of the political roles of INGOs and challenges negotiating multiple relationships with communities, governments, and social movements. PRQ: Junior standing or consent of department.

432 NATURE AND THE ENVIRONMENT ACROSS CULTURES (3). Investigation of the different ways people conceptualize nature and the environment across cultures. Focus is on out-of-awareness cultural models, that is, intermediary mental organizations of meaning that stand between universal concepts and culturally bound realizations. Critical evaluation of a number of projects that attempt to use local and/or indigenous knowledge in managing the relationship between people, nature, and the environment is included.

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.

438. CULTURAL MODELS: THE LANGUAGE OF CULTURE (3). Cultural models as intermediary mental organizations of meaning that stand between universal concepts and culturally bound realizations. Origin of the concept in various disciplines such as anthropology, artificial intelligence, linguistics, and cognitive psychology. Research on cultural models in various cultures. PRQ: ANTH 230 or consent of the department.

440. FOSSIL HUMANS (3). A survey of the human fossil record. Emphasis on interpretation of morphology and theory in human paleontology. PRQ: ANTH 240 or consent of department.

441. SEX AND GENDER IN PRIMATES (3). Theories of the evolution of sex differences and associated gender roles in human and nonhuman 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 nonhuman 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.* A survey of the primate fossil record, with an 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). Detailed study of the skeletal anatomy of living primates including primate dental and skeletal adaptations, phylogeny, speciation, and biogeography. PRQ: ANTH 240 or consent of department.

448. USES AND ABUSES OF EVOLUTIONARY THEORY (3). Review of the history of evolutionary theory, challenges to evolutionary theory, and the concept of biological determinism as applied to the human species. Examination of how contemporary anthropological research in human behavioral ecology and gene-culture evolution contributes to understanding human behavior.

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.

453. **ARCHAEOLOGICAL THEORY (3).** Development of archaeological theory from the mid-19th century to the present. Connections of archaeological theory to major anthropological issues. PRQ: ANTH 210 or consent of department.

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.

461. **METHODS IN ARCHAEOLOGY (3).** Introduction to the analysis of ceramics, lithics, botanical and faunal remains, settlements, and other archaeological material. Emphasis on selecting techniques for analysis and interpreting analytical results. PRQ: ANTH 210 or consent of department.

462. **COLLECTIONS MANAGEMENT (3).** Lectures and practical experience in various aspects of museum work, particularly those related to the handling and care artifacts. Original research will be carried out on an artifact in the museum collection.

463. **ETHNOHISTORY (3).** Approaches to locating, evaluating, and utilizing oral and written historical sources in ethnographic and anthropological investigations. PRQ: ANTH 220.

464. **DISASTERS WITHOUT BORDERS (3).** *Crosslisted with CLCE 464X.* Social construction of disasters with an emphasis on the disaster response and forces that contribute to the vulnerability of a community, nation, or region. Covers social policy, humanitarian aid, media coverage, and a range of local, national, or global forces such as inequality, land tenure, social exclusion, and mass urbanization.

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.

466. **HUNTERS-GATHERERS AND THE TRANSITION TO FOOD PRODUCTION (3).** Detailed study of hunter-gatherers as a societal type and the foraging of wild foods as an economic activity. Topics include defining "hunter-gatherers," the origins and evolution of hunting and gathering, optimal foraging theory, the cross-cultural analysis of foraging societies, the origins of food production, and the persistence of foraging as an economic activity among food producing societies. The scope and limits of diversity among societies and practices associated with the exploitation of wild food resources are also considered. PRQ: ANTH 220 or 210 or consent of the 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.

469. **ARCHAEOLOGY OF EMPIRES (3).** An archaeological perspective on the formation, character, and fall of ancient empires, including militarism, urbanism, state ideology, provincial life, infrastructure, social and ethnic relations, economic interactions, and collapse. The course is comparative, drawing from both Old World and New World empires. PRQ: ANTH 210 or consent of department.

470. **CHINESE ARCHEOLOGY (3).** China's prehistory from Peking Man to the kingdom of Qin. Development of agriculture, pottery, bronze and iron metallurgy, and comparison with other ancient civilizations.

471. **ANCIENT ENVIRONMENTS AND HUMAN TECHNOLOGY (3).** In-depth anthropological perspective on ancient human interaction with the environment, with emphasis on the role the environment plays in cultural change. Experience in the synchronization of environmental and archaeological research and understanding how ancient societies manipulated their environments to foster ecological change.

490. **ANTHROPOLOGICAL RESEARCH TRAINING (3-6).**

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 (1-6).**

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 FOR SECONDARY EDUCATORS (3).** *Crosslisted as ECON 496X, GEOG 496X, HIST 496, POLS 496X, PSYC 496X, and SOCI 496X.* Organization and presentation of materials for history and social science courses at the secondary levels. PRQ: Admission to the history or social science secondary teacher education program and permission of the Department of History's office of secondary teacher education.

498. **INDEPENDENT STUDY IN ANTHROPOLOGY (1-6).** Special readings, topics, and research projects in anthropology. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

Anthropology Faculty

Kendall M. Thu, Ph.D., University of Iowa, Presidential Engagement Professor, chair
 Giovanni Bennardo, Ph.D., University of Illinois, Presidential Research Professor
 Kristen Borre, Ph.D., University of North Carolina, adjunct assistant professor
 Judith Calleja, Ph.D., Wayne State University, adjunct assistant professor
 Winifred Creamer, Ph.D., Tulane University, Distinguished Research Professor
 Daniel L. Gebo, Ph.D., Duke University, Distinguished Research Professor, Distinguished Teaching Professor, Board of Trustees Professor
 Mitchell Irwin, Ph.D., Stony Brook University, assistant professor
 Michael J. Kolb, Ph.D., University of California at Los Angeles, Presidential Teaching Professor
 Sibel Kusimba, Ph.D., University of Illinois, associate professor
 Judy L. Ledgerwood, Ph.D., Cornell University, professor
 Emily McKee, Ph.D., University of Michigan, assistant professor
 Mark W. Mehrer, Ph.D., University of Illinois, associate professor
 Andrea K. Molnar, Ph.D., Australian National University, Presidential Engagement Professor
 Leila Porter, Ph.D., Stony Brook University, associate professor
 Susan D. Russell, Ph.D., University of Illinois, Presidential Engagement Professor
 Kerry Sagebiel, Ph.D., University of Arizona, adjunct assistant professor
 Mark Schuller, Ph.D., University of California, assistant professor
 Katharine Wiegale, Ph.D., University of Illinois, adjunct assistant professor

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 licensure 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 preprofessional 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

A minimum of 15 of the 46 semester hours of biology required for the major must be taken at NIU.

Requirements in Department (46)¹

BIOS 208 - Fundamentals of Cellular Biology (3), and BIOS 210 - Fundamentals of Cellular Biology Laboratory (1)
 BIOS 209 - Fundamentals of Organismal Biology (3), and BIOS 211 - Fundamentals of Organismal Biology Laboratory (1)
 BIOS 308 - Genetics (5)
 BIOS 494 - Biology Senior Assessment (1)
 Electives from biological sciences courses at the 300 or 400 level (32)
 Biology electives are offered in four primary areas of departmental specialization and include:
 1) Biomedical Pre-Professional
 2) Cell and Molecular Biotechnology
 3) Microbiology
 4) Biodiversity: Ecology, Evolution and Conservation

Students should consult with the departmental adviser for assistance in selecting the appropriate sequence of courses within one of these fields of study. Lists of biology upper-level elective courses that are particularly relevant for each of the tracks are available in the Department of Biological Sciences office and website.

Requirements outside Department (31-33)

*CHEM 210 - General Chemistry I (3), and
 *CHEM 212 - General Chemistry Laboratories I (1)
 *CHEM 211 - General Chemistry I (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 155 - Trigonometry and Elementary Functions (3),
 OR satisfactory performance on the Mathematics Placement Exam
 *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: 78-80

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.

Transfer Credit

Students will receive upper level credit for BIOS transfer courses articulated as a "BIOS EL" in the Community College Articulation Handbook.)

Educator Licensure

All students who seek licensure to teach biology in Illinois schools should consult with the departmental licensure adviser as soon as possible and also refer to the "Educator Licensure Requirements" section of this catalog.

Undergraduate biology majors may apply for admission to educator licensure in biology 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 licensure without becoming a candidate for a degree should consult with the biology licensure adviser as early as possible.

It is strongly recommended that students completing these emphases obtain a secondary endorsement in at least one subject other than biology.

Admission and Retention Requirements in the Discipline

Students interested in pursuing licensure in biology must apply in writing to the departmental licensure adviser. Students must complete a program of study approved by the departmental licensure 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 licensure must complete the equivalent of the mathematics sequence MATH 211 and STAT 301, BIOS 305, BIOS 313, BIOS 316, BIOS 317, BIOS 355, and BIOS 484, and a selection of elective biology courses chosen in close consultation with the departmental licensure adviser to ensure adequate breadth and depth of discipline background. Students pursuing a degree in secondary science educator licensure must have a grade of C or better in all course work specifically required for licensure. This includes all biology chemistry, physics, and math courses, pedagogy, and written communication, oral communication, and psychology general education classes. Higher numbered courses may be substituted if approved by the departmental licensure adviser.

*Available for general education credit.

¹ There is a 50-semester-hour limit of biology courses whether or not they apply to the major.

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.

All potential licensure candidates must

have a satisfactory review of progress with the departmental licensure adviser each semester after admission to the licensure program.

take and pass the ILTS Test of Academic Proficiency prior to applying to the licensure program.

take and pass the ILTS Biology Content Test prior to applying to student teaching.

take and pass the ILTS Assessment of Professional Teaching test before completion of the program.

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 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 (2)

ETT 402 - Teaching and Learning with Technology (3)

Additional Requirements

EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)

SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

The State of Illinois has moved from a course-based set of requirements for licensure to course and standards-based requirements. Approved licensure 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 licensure program requirements are designed to prepare candidates for licensure 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 Test of Academic Proficiency and secondary licensure subject matter examinations of the Illinois Licensure Testing System, passage of the Assessment of Professional Teaching test, 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 licensure requirements.

Additional course work may be required as determined and approved by the biology licensure coordinator to meet state standards for the preparation of teachers, licensure requirements and student needs.

Degree with Biology Honors

The degree Bachelor of Science with Honors in Biological Sciences will be awarded to students satisfying the following requirements.

- 1) Maintain a GPA of at least 3.50 in all departmental BIOS, CHEM, MATH, and PHYS course requirements;
- 2) Gain approval for admission into the program from the Department of Biological Sciences Honors adviser, as well as the faculty member under whom the student will engage in research;
- 3) Complete BIOS 370, Directed Research in Biology and 6 semester hours of BIOS 495, Honors Biology Directed Research under the faculty member's supervision²;
- 4) Present and explain the results of the honors project at either the departmental or university undergraduate research symposium; and,
- 5) Submit an approved senior thesis to the departmental honors adviser.

Minor in Biological Sciences (19)

BIOS 208 - Fundamentals of Cellular Biology (3),

and BIOS 210 - Fundamentals of Cellular Biology Laboratory (1)

BIOS 209 - Fundamentals of Organismal Biology (3),

and BIOS 211 - Fundamentals of Organismal Biology Laboratory (1)

Electives from biological sciences courses at the 300 or 400 level (11)

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.). Not open for credit toward the major in biological sciences.

103. GENERAL BIOLOGY (3). Chemistry of living systems, cell structure and function, energetics, classical and molecular genetics, information flow, reproduction, evolution and diversity of life, and ecology. Not open for credit for majors in biological sciences.

105. GENERAL BIOLOGY LABORATORY (1). Optional laboratory designed to accompany BIOS 103. Not open for credit for majors in biological sciences. CRQ: BIOS 103.

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.

107. EVOLUTION FOR EVERYONE (3). Beginning with core principles, exploration of evolutionary theory from an integrative and interdisciplinary perspective, with topics ranging from the biological sciences to all aspects of humanity. Not open for credit for majors in the 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.

² Collectively, a maximum of 6 hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 490, BIOS 495, and BIOS 499 may be applied to the major.

201. THE PROFESSIONAL SECONDARY SCIENCE TEACHER (1). 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. S/U grading. PRQ: Consent of department. CRQ: ILAS 201.

208. FUNDAMENTALS OF CELLULAR BIOLOGY I (3). Introduction to fundamental processes of organisms operating at the molecular and the cellular level of organization. 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. CRQ: CHEM 210, CHEM 212, and BIOS 210.

209. FUNDAMENTALS OF ORGANISMAL BIOLOGY (3). Introduction to higher levels of biological organization from organism to the ecosystem. Topics include organismal diversity, mechanisms of micro- and macro-evolution, animal behavior, and the dynamics and organization of populations, communities and ecosystems. Three hours of lecture per week. PRQ: BIOS 208 and BIOS 210, or BIOS 103 and BIOS 105. CRQ: BIOS 211.

210. FUNDAMENTALS OF CELLULAR BIOLOGY LABORATORY (1). Designed to accompany BIOS 208. One 3-hour period per week. CRQ: BIOS 208.

211. FUNDAMENTALS OF ORGANISMAL BIOLOGY LABORATORY (1). Designed to accompany BIOS 209. One 3-hour period per week. CRQ: BIOS 209.

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. Two hours of lecture and two hours of laboratory per week. PRQ: CHEM 110 or CHEM 210; and either BIOS 103 and BIOS 105, or BIOS 208 and BIOS 210.

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.

302. MOLECULAR BIOLOGY (3). Fundamentals of molecular biology including the structure of DNA and RNA, mechanisms of DNA replication, transcription and translation, gene organization, genetic variation and repair, and regulation of gene expression. PRQ: BIOS 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

303. CELL BIOLOGY (3). Cell structure and function including macromolecules, biochemistry, energy conversions, membranes, cellular organelles, cytoskeleton, signal transduction, and cell death. Not available for credit to students with previous credit in BIOS 300. PRQ: BIOS 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

304. MOLECULAR CELL BIOLOGY LABORATORY (3). Laboratory course designed to give students experience in the broad range of modern experimental methods, procedures, and techniques required in the field. One hour of lecture and two 3-hour laboratory periods per week. CRQ: BIOS 302 and BIOS 303.

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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

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 208, BIOS 210, CHEM 211, and CHEM 213. CRQ: BIOS 209 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 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 208, BIOS 210, BIOS 209, BIOS 211, CHEM 211, 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 208, BIOS 210, BIOS 209, 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 208, BIOS 210, BIOS 209 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: At least sophomore standing.

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.

340. FUNDAMENTALS OF HUMAN ANATOMY AND PHYSIOLOGY I (3). On-line course presenting the functional design and homeostatic physiological mechanisms for all major human organ systems. Includes lecture videos, animations, study guides, and course notes. Not open for credit for majors in biological sciences or for students with previous credit in BIOS 355 or BIOS 357. PRQ: BIOS 103 and BIOS 105, or BIOS 208; and either CHEM 110 or CHEM 210.

341. FUNDAMENTALS OF HUMAN ANATOMY AND PHYSIOLOGY II (3). On-line course presenting a regional approach to anatomical structure in the skeletal, muscular, nervous, vascular, and organ systems. Includes anatomical images and dissection videos along with study guides and course notes. Not open for credit for majors in biological sciences or for students with previous credit in BIOS 311. PRQ: BIOS 103 and BIOS 105, or BIOS 208; and either CHEM 110 or CHEM 210.

341X. PRIMATOLOGY (3). *Crosslisted as ANTH 341.* Study of living nonhuman primates. Topics include primate taxonomy, behavior, natural history traits, ecology, reproduction, feeding and locomotor adaptations, and anatomy. Lectures and laboratory. PRQ: ANTH 240 or consent of department.

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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213. CRQ: PHYS 211 or PHYS 273.

¹ Collectively, a maximum of 6 hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 490, BIOS 495, and BIOS 499 may be applied to the major.

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 open for credit for majors in biological sciences. Students may not receive credit toward the minor for both BIOS 355 and BIOS 357. PRQ: CHEM 110 or CHEM 210; and either BIOS 103 and BIOS 105, or BIOS 208 and BIOS 210.

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.

370.¹ DIRECTED RESEARCH IN BIOLOGY (1-3). Experimental laboratory and field research 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 educator licensure 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. 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 (1-8). 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 ENVS 301 and ENVS 302.

409X. WATER QUALITY (4). *Crosslisted as ENVS 409, GEOL 409X, and PHHE 409X.* Survey of microbiological and chemical parameters affecting water quality and their associated public health aspects. Topics include microbial detection methods, waterborne disease, organic and inorganic parameters, drinking water, wastewater treatment plants, source water, and risk assessment. Lectures, laboratories, and a field trip. PRQ: CHEM 110 and CHEM 111; or consent of the department.

410. FOOD AND INDUSTRIAL MICROBIOLOGY (3). Fundamental aspects of microorganisms (including viruses and prions) associated with foods and the food industry. Topics will include isolation and enumeration of microorganisms in food, microbial species that are important to the food industry, techniques for preventing and controlling microbial contamination of foods, and procedures for reducing health hazards associated with food contamination. PRQ: BIOS 313.

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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

412. MYCOLOGY (4). Culture, morphology, and economic significance of the fungi. Two hours of lecture and four hours of laboratory. PRQ: BIOS 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

413. MICROBIAL PHYSIOLOGY (4). Physical and chemical aspects of the functions of bacteria and other microorganisms. Three hours of lecture and three hours of laboratory. PRQ: BIOS 313. CRQ: 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.

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.

418. HUMAN HEREDITY (3). Inheritance in humans. Not open for credit toward the major in biological sciences. PRQ: BIOS 103 or BIOS 109.

419. MICROBIAL SYSTEMATICS AND DIVERSITY (3). Understanding the metabolic diversity of bacteria and archaea through selective culturing, isolation, and determinative testing. Cultivate and characterize microbial species of importance to the environment, human health, and the food and biofuel/bioenergy industries. One weekly lecture and two three-hour laboratory sessions. PRQ: BIOS 313.

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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

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 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 302, BIOS 303, 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 208, BIOS 210, BIOS 209, and BIOS 211.

431X. NEUROPSYCHOLOGY (4). *Crosslisted as PSYC 431.* Understanding the physiological functioning of the body as it affects normal and dysfunctional behavior with an emphasis on examining clinical cases and neural pathologies. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and PSYC 300; or consent of department.

432. RADIATION BIOLOGY (3). The effects of radiation upon cells and organisms. PRQ: BIOS 302 and BIOS 303.

433. BEHAVIORAL ECOLOGY (3). Examples and theories of how behavior influences survival and reproduction in different environments. PRQ: BIOS 208, BIOS 210, BIOS 209, and BIOS 211.

435X. PRIMATE EVOLUTION (3). *Crosslisted as ANTH 445.* A survey of the primate fossil record, with an emphasis on adaptation and phylogeny. PRQ: ANTH 240 or consent of department.

¹ Collectively, a maximum of 6 hours of credit (9 in the case of students admitted to the department honors program) in BIOS 370, BIOS 490, BIOS 495, and BIOS 499 may be applied to the major.

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.

438. MOLECULAR GENETICS OF PROKARYOTES (3). Mechanisms of molecular, bacterial, and viral genetics including genetic recombination, mutagenesis, gene regulation and expression, transposons, genetic engineering, and genomics. Emphasis on recent literature. PRQ: BIOS 302, BIOS 308, and BIOS 313.

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.

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 302 and BIOS 303, or BIOS 313 and CHEM 330 or CHEM 336.

441. PRACTICAL BIOINFORMATICS FOR BIOLOGISTS (3). Hands-on experience using bioinformatics software for applications that include database searches, sequence alignment, phylogeny building, protein structure analysis, protein function annotation, regulatory motif prediction, and next generation sequence analysis. PRQ: BIOS 302 or BIOS 308

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.

443. BIOINFORMATICS (3). Introduction to theory, strategies, and practice of data management and analysis in molecular biology. Topics include DNA and protein sequence analysis, biological databases, genomic mapping, and analysis of gene expression data. PRQ: BIOS 302 or BIOS 308.

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 302 and BIOS 303, 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 303 and BIOS 355.

446. ADVANCED HUMAN ANATOMY (4). Gross anatomy of the human body, including the examination of prosected cadavers, with functional, evolutionary, histological, developmental, and clinical correlates. Two hours of lecture and six hours of laboratory per week. PRQ: BIOS 355.

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 208, BIOS 210, BIOS 209, 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 208, BIOS 210, BIOS 209, and BIOS 211, or ENVS 301 and ENVS 302.

450. MOLECULAR BIOLOGY OF CANCER (3). Topics include carcinogenesis, metastasis, angiogenesis, cancer genetics (DNA damage/repair, genetic instability, oncogenes, tumor suppressor genes), regulation of cell proliferation, apoptosis, treatment of cancer (radiation, chemotherapy, and surgery). PRQ: BIOS 302 and BIOS 303.

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 208, BIOS 210, BIOS 209, 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 302 and BIOS 303, 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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

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 208, BIOS 210, BIOS 209, and BIOS 211.

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 208, BIOS 210, BIOS 209, and BIOS 211.

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 208, BIOS 210, BIOS 209, and BIOS 211; or GEOL 320.

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.

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.

463. PHARMACOLOGY AND TOXICOLOGY (3). Topics include principles of drug distribution, drug metabolism, drug-receptor binding, mechanisms of drug action and toxicity, and strategies for therapeutic drug design. Several specific examples of therapeutic drugs and environmental toxins will be discussed in detail to illustrate basic principles. PRQ: BIOS 303 and BIOS 355.

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 302 and BIOS 303, and CHEM 330 or CHEM 336.

465. CELLULAR PHYSIOLOGY (3). Principles underlying cellular activity. Topics include the biochemistry of cells, cell organelles, cell environment, membranes, and energy conversions. PRQ: BIOS 302 and BIOS 303.

466X. INTRODUCTION TO MICROPALAEONTOLOGY (3). *Crosslisted as GEOL 471*. Morphology, classification, paleogeography, stratigraphic application, and geochemistry of calcareous, siliceous, and phosphatic microfossils. PRQ: GEOL 322 or consent of department.

467. ADVANCED MOLECULAR BIOLOGY (3). Mechanisms of gene expression, and regulation of gene activity in eukaryotic and prokaryotic systems. PRQ: BIOS 302, BIOS 303, BIOS 313, and either CHEM 330 or CHEM 336.

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.

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 and PHYS 211 or PHYS 273.

476. PLANT GENETICS (3). Topics in modern plant genetics, including genome organization and function, mechanisms of reproduction, barriers to inbreeding, transgenic plant methodology, genetically-modified crops, traditional and molecular methodologies in plant breeding, future of plant biotechnology. PRQ: BIOS 302 or BIOS 308.

477. HUMAN GENETICS (3). Study of human genes, genome organization, and genetic diseases, with emphasis on DNA-based techniques. PRQ: BIOS 308.

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 302 or BIOS 308.

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 208, BIOS 209, BIOS 210, BIOS 211, CHEM 211, and CHEM 213.

482. BIOLOGY OF FORENSIC ANALYSIS (4). Topics include DNA analysis, forensic pathology, forensic dentistry, fingerprints, craniofacial reconstruction, and blood spatter analysis. Three hours of lecture and three hours of laboratory per week. PRQ: BIOS 302.

483. ANIMAL RESEARCH AND COMPARATIVE MEDICINE (3). Fundamental concepts in animal research and comparative medicine, including genetically modified animals, infectious disease monitoring, ethics, biocontainment, and regulatory oversight of common laboratory animals. PRQ: BIOS 313 or BIOS 355 or PSYC 300.

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. PRQ: GEOL 120 and GEOL 121, or consent of department.

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 (2). Transitioning experience in which the licensure 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 teacher performance assessment, a professional development plan, and a resume. PRQ: Consent of department. CRQ: BIOS 485.

487. CONSERVATION GENETICS (3). Examination of the genetic characteristics of organisms and their environments. Application of genetic principles to conservation biology. Topics include genetics of small populations, genetic monitoring, and genetic restoration. PRQ: BIOS 308.

488. APPLIED MICROBIAL BIOTECHNOLOGY (3). Topics include applications of microorganisms for industrial processes related to the production of energy, food, chemicals, pharmaceuticals, as well as bioremediation. Two hours of lecture and three hours of laboratory per week. PRQ: BIOS 313.

490¹. COOPERATIVE EDUCATION/INTERNSHIP (3). Biological experience gained in a formal internship or associated with biologically relevant employment. A minimum of 150 hours of contact time is required and students must gain prior approval from the departmental Director of Undergraduate Studies. Students will be required to submit a formal written report along with an assessment from the internship supervisor. S/U grading.

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 302 and BIOS 308.

493. TOPICS IN BIOLOGY (1-3).

- 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.

494. BIOLOGY SENIOR ASSESSMENT (1). Assessment of the scientific competence of graduating seniors. Includes development of career planning and placement skills. Required for graduation. PRQ: Senior status and biological sciences major.

495.¹ DIRECTED RESEARCH BIOLOGY HONORS (1-3). Experimental laboratory or field research under the guidance of a faculty member. Eligible students must be admitted into the Department of Biological Sciences Honors Program. May be repeated to maximum of 6 semester hours. PRQ: Permission of department.

499.¹ DIRECTED RESEARCH UNIVERSITY HONORS (1-3). Experimental laboratory or field research under the guidance of a faculty member. Eligible students must be admitted into the Honors Program. May be repeated to maximum of 6 semester hours. PRQ: Permission of department.

¹ 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.

Biological Sciences Faculty

Barrie P. Bode, Ph.D., University of Florida, professor, chair
 Nicholas A. Barber, Ph.D., University of Missouri, St. Louis, assistant professor
 Richard J. Becker, Ph.D., Northern Illinois University, assistant chair for business and operations
 C. Jackson Bennett, Ph.D., University of Wisconsin, adjunct 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), Presidential Teaching Professor
 Melvin Duvall, Ph.D., University of Minnesota, St. Paul, professor
 Sherine Elsawa, Ph.D., University of North Carolina, assistant professor
 Kenneth W. Gasser, Ph.D., Washington State University, associate professor
 Richard Hahin, Ph.D., University of Maryland, adjunct professor
 Laszlo Hanzely, Ph.D., Southern Illinois University, Distinguished Teaching Professor, adjunct
 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
 Mitrick A. Johns, Ph.D., University of Oregon, associate professor
 Barbara P. Johnson-Wint, Ph.D., Michigan State University, associate professor
 Holly Jones, Ph.D., Yale University, assistant professor
 Bethia H. King, Ph.D., Purdue University, professor
 Richard B. King, Ph.D., Purdue University, Presidential Research Professor
 Rangaswamy Meganathan, Ph.D., Oklahoma State University, Distinguished Research Professor
 Peter L. Meserve, Ph.D., University of California, Distinguished Research Professor, emeritus
 Jon Miller, Ph.D., University of Nebraska at Lincoln, Presidential Engagement Professor
 Virginia L. Naples, Ph.D., University of Massachusetts, professor
 Neil O. Polans, Ph.D., University of California, Davis, adjunct associate professor
 Karen Samonds, Ph.D., State University of New York, Stony Brook, assistant professor
 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
 Wes Swingley, Ph.D., Arizona State University, assistant professor
 Ronald Toth, Ph.D., University of Massachusetts, professor, adjunct
 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
 Yanbin Yin, Ph.D., Peking University (Beijing, China), assistant professor
 Jerrold H. Zar, Ph.D., University of Illinois, adjunct professor
 Shengde Zhou, Ph.D., Auburn University, associate professor

¹ 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.

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 2, respectively. With appropriate electives, either emphasis 1 or emphasis 2 will be appropriate for students interested in forensic science. Emphasis 3 is designed to prepare students for a career in teaching at the 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 210 must take the Chemistry Placement Examination, so they may begin their study of chemistry at the appropriate level.

Major in Chemistry (B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Chemistry

Certified by the Committee on Professional Training of the American Chemical Society.

Requirements in Department (43-44)

CHEM 210 - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
 CHEM 211 - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
 CHEM 325 - Analytical Chemistry I (3)
 CHEM 336 - Organic Chemistry I (3), and CHEM 338 - Organic Chemistry Laboratory I (1)
 CHEM 337 - Organic Chemistry II (3), and CHEM 339 - Organic Chemistry Laboratory II (1)
 CHEM 425 - Analytical Chemistry II (4)
 CHEM 440 and CHEM 441 - Physical Chemistry I and II (6)
 CHEM 442 and CHEM 443 - Physical Chemistry Laboratory I and II (2)
 CHEM 460 - Inorganic Chemistry of the Transition Metals (3)
 CHEM 461 - Inorganic Chemistry Laboratory (1)
 CHEM 470 - General Biological Chemistry (3)
 CHEM 498/CHEM 499H - Research (2)
 Electives chosen with the advice of the chemistry faculty from
 CHEM 340 and 400 level classes excluding classes numbered 490 to 497 or an appropriate advanced course in mathematics or physics (3-4)

Requirements outside Department (22-26)

ENGL 350 - Writing Across the Curriculum (3)
 *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: 65-70

Recommendations

CSCI 230 - Computer Programming in FORTRAN (4),
 OR CSCI 240 - Computer Programming in C++ (4)
 FLGE 101 and FLGE 102 - Beginning German I and II (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)
 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. Biochemistry

Certified by the Committee on Professional Training of the American Chemical Society.

Requirements in Department (42)

CHEM 210 - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
 CHEM 211 - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
 CHEM 325 - Analytical Chemistry I (3)
 CHEM 336 - Organic Chemistry I (6), and CHEM 338 - Organic Chemistry Laboratory I (1)
 CHEM 337 - Organic Chemistry II (3), and CHEM 339 - Organic Chemistry Laboratory II (1)
 CHEM 425 - Analytical Chemistry II (4)
 CHEM 440 - Physical Chemistry I (3)
 CHEM 442 - Physical Chemistry Laboratory I (1)
 CHEM 460 - Inorganic Chemistry of the Transition Metals (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 (2)

Requirements outside Department (30-33)

BIOS 208 - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
 BIOS 209 - Fundamentals of Biology II (3), and BIOS 211 - Fundamentals of Biology II Laboratory (1)
 BIOS 302 - Molecular Biology
 ENGL 350 - Writing Across the Curriculum (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 2, Biochemistry: 72-75

Recommendations

Students are encouraged to take at least one of

- CHEM 462 - Inorganic Chemistry of the Main Group Elements (3),
- CHEM 498/ CHEM 499H - Research (2), and CSCI 230 - Computer Programming in FORTRAN (4)

Students planning on pursuing graduate degrees in chemistry or biochemistry are strongly encouraged to take the following.

- CHEM 441 - Physical Chemistry II (3)
- CHEM 443 - Physical Chemistry Laboratory II (1)

Students interested in forensic science are encouraged to take at least one of the following.

- BIOS 355 - Human Physiology (4)
- BIOS 440 - Immunobiology (3)
- BIOS 477 - Human Genetics (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 3. 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.

Requirements in Department (52-58)

- CHEM 210 - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
- CHEM 211 - General Chemistry II (3), and CHEM 213 - General Chemistry Laboratory II (1)
- CHEM 325 - Analytical Chemistry I (3)
- CHEM 336 Organic Chemistry I (3), and CHEM 332 - General Organic Chemistry Laboratory I (1)
- CHEM 337 - Organic Chemistry II (3), and CHEM 333 - General Organic Chemistry Laboratory II (1)
- CHEM 401X - Third Clinical High School/Middle School Experience in Chemistry (2) (must be taken concurrently with CHEM 495X)
- CHEM 425 - Analytical Chemistry II (4),
- OR CHEM 460 - Inorganic Chemistry of the Transition Metals (3),
- OR CHEM 470 - General Biological Chemistry (3)
- CHEM 440 - Physical Chemistry I (3)
- CHEM 442 - Physical Chemistry Laboratory I (1)
- CHEM 490X - Science Across Time and Culture (2)
- CHEM 493X - Interdisciplinary Teaching of Science in Secondary Education (3)
- CHEM 495X (PHYS 495) - Teaching of Physical Sciences (3)
- CHEM 496 - Transition to the Professional Chemistry Teacher (1)
- CHEM 497 - Student Teaching (Secondary) in Chemistry/Physical Sciences (7-12)
- Electives chosen from CHEM 339 and 400-level classes (4-9)

Requirements outside Department

- ENGL 350 - Writing Across the Curriculum (3)
- EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
- ETT 402 - Teaching and Learning with Technology (3)
- ILAS 201 - Introductory Clinical Experience (1)
- ILAS 301 - Second Clinical Experience (1)
- *MATH 229 and MATH 230 - Calculus I and II (8)
- *PHYS 210 and *PHYS 211 - General Physics I and II (8)
- SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

Recommendations

- BIOS 208 - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1)
- BIOS 209 - Fundamentals of Biology II (3)
- BIOS 211 - Fundamentals of Biology II Lab (1)
- CSCI 240 - Computer Programming in C++ (4)
- *GEOL 120 - Introductory Geology (3),
- OR GEOL 325 - Solid Earth Composition (4)

Emphasis 4. Chemistry for Pre-Professional Students¹**Requirements in Department (32-33)**

- CHEM 210 - General Chemistry I (3), and CHEM 212 - General Chemistry Laboratory I (1)
- CHEM 211 - General Chemistry II (3), CHEM 213 - General Chemistry Laboratory II (1)
- CHEM 325 - Analytical Chemistry I (3)
- CHEM 336 - Organic Chemistry I (3) and CHEM 337 - Organic Chemistry II (3),
- OR CHEM 330 - General Organic Chemistry I (3) and CHEM 331 - General Organic Chemistry II (3)
- CHEM 338 - Organic Chemistry Laboratory I (1) and CHEM 339 - Organic Chemistry Laboratory II (1),
- OR CHEM 332 - General Organic Chemistry Laboratory I (1) and CHEM 333 - General Organic Chemistry Laboratory II (1)
- CHEM 440 - Physical Chemistry I (3)
- CHEM 442 - Physical Chemistry Laboratory I (1)
- CHEM 470 - General Biological Chemistry (3), and two electives chosen from CHEM 438 and 400-level classes excluding classes numbered 490 to 497 (6-7),
- OR CHEM 472 and CHEM 473 - Biological Chemistry I and II (6) and one elective chosen from CHEM 438 and 400-level classes excluding classes numbered 490 to 497 (3-4)
- No more than 3 semester hours of CHEM 498/CHEM 499H, research, will be counted toward requirements in department

Requirements outside Department (38)

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 208 and BIOS 209 - 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)
- ENGL 350 - Writing Across the Curriculum (3)
- 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 (7)

Total Hours for Emphasis 4, Chemistry for Pre-Professional Students: 70-71**Educator Licensure**

Students interested in emphasis 3 should consult with the departmental licensure adviser as soon as possible and also refer to the "Educator Licensure Requirements" section of this catalog.

Undergraduate chemistry majors may apply for admission to educator licensure in emphasis 3 at the end of the sophomore year.

Please note: 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 chemistry education as early as possible.

It is strongly recommended that students completing this emphasis obtain a secondary endorsement in at least one subject other than chemistry.

Admission Requirements

To be admitted to the licensure program, students in emphasis 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,

* 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.

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,
 submitted an application and obtained approval from the discipline coordinator in the Department of Chemistry and Biochemistry, and
 passed the ILTS Test of Academic Proficiency.

Retention Requirements

Students admitted to the licensure program must

Students pursuing a degree in secondary science educator licensure must have a grade of C or better in all course work specifically required for licensure. Higher number courses may be substituted if approved by the department.

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;

prior to student teaching complete 8 semester hours of biological sciences, including at least 3 semester hours in courses numbered 200 and above;

take and pass the ILTS Chemistry Content Test prior to applying to student teaching; and,

take and pass the ILTS Assessment of Professional Teaching test before completion of the program.

General Requirements and Information

The program of courses for meeting licensure 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 licensure program.

The State of Illinois has established course and standards-based requirements for licensure. Approved licensure 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 licensure program requirements are designed to prepare candidates both to meet state course 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 Test of Academic Proficiency and secondary licensure subject matter examinations of the Illinois Licensure Testing System, passage of the Assessment of Professional teaching test, and demonstration that the candidate has met teaching standards for the chemistry or environmental science teacher.

Contact the discipline coordinator for information on the necessary criteria that experiences must meet to demonstrate fulfillment of licensure requirements.

Degree with Honors

The B.S. degree with honors in chemistry will be awarded to students who have a minimum 3.20 overall GPA and a 3.20 GPA in all requirements, both in and outside the department; and who complete 13 semester hours of honors chemistry courses numbered CHEM 325 and above (not including CHEM 370). The honors chemistry course work must include CHEM 499 (2-4 credits) and the presentation of a capstone thesis

Minor in Chemistry (19)

*CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)

*CHEM 211 - 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

100. CHEMISTRY IN EVERYDAY LIFE (3). The principles of chemistry, with emphasis on the role of chemistry in the modern world. Includes topics such as energy resources, environmental issues, health and nutrition, and modern materials. Three hours of lecture/week.

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 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.

210. GENERAL CHEMISTRY I (3). Fundamental laws and principles of chemistry; atomic structure and chemical bonding; stoichiometry; kinetic theory; gases; liquids; solids; solutions. Three hours of lectures and one recitation per week. PRQ: MATH 110, or MATH 155, or MATH 229, or satisfactory performance on the Math Placement Examination; and CHEM 110, or satisfactory performance on the Chemistry Placement Examination, or consent of department. CRQ: CHEM 212.

211. GENERAL CHEMISTRY II (3). Continuation of CHEM 210. Kinetics, equilibria, thermodynamics, electrochemistry; descriptive chemistry of the elements. Three hours of lectures and one recitation per week. PRQ: CHEM 210 and CHEM 212. CRQ: CHEM 213.

212. GENERAL CHEMISTRY LABORATORY I (1). Designed to accompany CHEM 210. One 3-hour period per week. CRQ: CHEM 210.

213. GENERAL CHEMISTRY LABORATORY II (1). Designed to accompany CHEM 211. One 3-hour period per week. CRQ: CHEM 211.

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 (3). Fundamentals of measurement, treatment of data and analysis of error. Emphasis on classical quantitative analysis and instrumental separation methods. Two hours of lecture and one 4-hour laboratory period a week. PRQ: CHEM 211 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 preprofessional students. Not available for credit for chemistry majors except in emphasis 4. Three hours of lectures a week. PRQ: CHEM 211 and CHEM 213.

331. GENERAL ORGANIC CHEMISTRY II (3). Second semester of a two-semester course in general organic chemistry for minors and preprofessional students. Not available for credit for chemistry majors except in emphasis 4. Three hours of lectures a week. PRQ: CHEM 330.

332. GENERAL ORGANIC LABORATORY I (1). Basic organic laboratory techniques, including compound synthesis and analysis of products. Not available for credit for emphasis 1 or emphasis 2 majors. One 3-hour period a week. CRQ: CHEM 330 or CHEM 336.

333. GENERAL ORGANIC LABORATORY II (1). Continuation of CHEM 332. Laboratory techniques. Not available for credit for emphasis 1 or emphasis 2 majors. One 3-hour period a week. CRQ: CHEM 331 or CHEM 337.

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 hours of lectures a week. PRQ: CHEM 211 and CHEM 213.

337. ORGANIC CHEMISTRY II (3). Continuation of CHEM 336. Chemistry majors only or consent of department. Three hours of lectures a week. PRQ: CHEM 336.

338. ORGANIC CHEMISTRY LABORATORY I (1). Introduction to modern laboratory techniques in organic chemistry, including compound synthesis and analysis of products, for students interested in careers in professional chemistry and biochemistry. One 3-hour period 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.

370. INTRODUCTORY BIOCHEMISTRY (3). Terminal course in beginning biochemistry for non-chemistry majors. Three lectures a week. PRQ: CHEM 230.

400. SELECTED TOPICS IN CHEMISTRY (3)

- A. Inorganic
- B. Analytical
- C. Organic
- D. Physical
- E. Biological
- G. Nanochemistry

Lecture and discussions of special topics. Three semester hours as scheduled; course may be repeated up to a maximum of 6 semester hours when topic varies. PRQ: Consent of department.

401. THIRD CLINICAL HIGH SCHOOL/MIDDLE SCHOOL EXPERIENCE IN CHEMISTRY (2). Discipline-based early clinical experience for students seeking educator licensure in chemistry 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. PRQ: Consent of department. CRQ: CHEM 495X.

422. ANALYTICAL SEPARATIONS (3). Fundamental principles of chemical separations and measurements with emphasis on instrumental methods. Survey of both traditional and emerging techniques. PRQ: CHEM 441 and CHEM 425, or consent of department.

423. MASS SPECTROMETRY (3). Fundamentals of mass spectrometry, including modern ionization techniques, major types of mass analyzers, and interface to separation techniques. Survey of biochemical, pharmaceutical, and environmental applications. PRQ: CHEM 441 and CHEM 425, or consent of department.

424. OPTICAL METHODS IN ANALYTICAL CHEMISTRY (3). Theoretical and practical applications of spectral measurements to research and chemical analysis, with emphasis on absorption, emission, and luminescence techniques in the principal regions of the electromagnetic spectrum. PRQ: CHEM 425 or consent of department.

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.

426. ELECTROANALYTICAL CHEMISTRY (3). Theory, practice, and applicability of electroanalytical measurements in analysis and research. Traditional and emerging techniques of electroanalytical chemistry and electrochemical kinetics are emphasized. PRQ: CHEM 425 and either MATH 232 or MATH 336, or consent of department.

427. ENVIRONMENTAL CHEMISTRY (3). *Crosslisted as ENVS 427X.* Exploration of atmospheric chemistry, air pollution, and water pollution, with particular emphasis on the impact of organic compounds in the environment. Three hours of lecture/week. PRQ: GEOG 101 or GEOL 105 or ENVS 301, and CHEM 211 and 213, or consent of the department.

431. ORGANIC SYNTHESIS (3). Systematic presentation of methods of assembling carbon skeletons, functional group interconversions, and analysis of synthetic pathways. PRQ: CHEM 331 or CHEM 337.

432. PHYSICAL ORGANIC CHEMISTRY (3). Mechanism and structure in organic chemistry including structural theory, stereochemistry, and the study of the reactive intermediates of organic chemistry. PRQ: CHEM 331 or CHEM 337, and CHEM 441 or consent of department.

435. SPECTROSCOPIC IDENTIFICATION OF ORGANIC MOLECULES (3). Application of spectroscopic techniques to the determination of organic structures. PRQ: Senior standing and CHEM 440.

438. ADVANCED ORGANIC CHEMISTRY LABORATORY (2). Lab activities involving multi-step synthetic reactions, advanced laboratory techniques, and use of spectroscopic methods to identify products from organic reactions. Two 3-hour periods a week. PRQ: CHEM 339 or consent of department.

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 211 and CHEM 213, MATH 230, and PHYS 211 or PHYS 273. PRQ or CRQ: CHEM 442.

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. PRQ or CRQ: CHEM 443.

442. PHYSICAL CHEMISTRY LABORATORY I (1). Modern experimental techniques and underlying theoretical principles for thermodynamics and chemical kinetics. Introduction to computer methods in physical chemistry. One four-hour laboratory per week. PRQ or CRQ: CHEM 440.

443. PHYSICAL CHEMISTRY LABORATORY II (1). Modern experimental techniques and underlying theoretical principles for spectroscopy and quantum mechanics. One four-hour laboratory per week. PRQ or CRQ: CHEM 441.

444. CHEMICAL THERMODYNAMICS (3). Fundamental laws of thermodynamics and applications to chemical problems. Calculation of thermodynamic quantities. PRQ: CHEM 441 or consent of department.

445. KINETICS (3). Theories and applications of rates of chemical reactions including reactions in the gas phase and in solution. Thermodynamic foundations of chemical reaction rates. Applications of kinetics in the determination of reaction mechanisms.

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.

450. NANOCHEMISTRY (3). Fundamental theory and experimental techniques underlying the fabrication methods and applications of nanoscale materials and devices. PRQ: CHEM 441, or consent of department.

460. INORGANIC CHEMISTRY OF THE TRANSITION METALS (3). Introduction to symmetry elements and point group classification. Structures, bonding, and physical properties of transition metal complexes, as identified by electronic, vibrational, and diffraction methods. Kinetics and thermodynamics of transition metal reactions. Organometallic chemistry and catalysis. Bioinorganic transition metal chemistry. 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 338 or consent of department. CRQ: CHEM 460 or consent of department.

462. INORGANIC CHEMISTRY OF THE MAIN GROUP ELEMENTS (3). Atomic structure and periodicity. Theories of ionic and covalent bonding, including ionic lattices. Acid-base theories and their application to synthesis. Descriptive chemistry and bioinorganic chemistry of main group elements. Three lectures per week. PRQ: CHEM 336, 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.

474. ENZYMES (3). Basic principles of the concepts of enzyme kinetics, theory and design of experimental methods, and interpretation of enzyme mechanisms. PRQ: CHEM 470 or consent of department. Recommended: CHEM 445.

475. PHYSICAL CHEMISTRY OF MACROMOLECULES (3). Comprehensive introduction to the use of physical chemistry in the study of macromolecules. PRQ: CHEM 441 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 licensure 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 (2). A transitioning experience in which the licensure 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 teacher performance assessment, 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 (10). Student teaching for a minimum of 10 weeks. Assignments to be arranged with the discipline coordinator of educator licensure after approval by the Department of Chemistry and Biochemistry. Not available for credit in the major. PRQ: CHEM 495X and consent of the department.

498. RESEARCH (1-6). Individual study of problems in experimental or theoretical chemistry. Includes laboratory safety training, instruction in the use of electronic library materials, and ethical conduct of research. Presentation of research results (oral seminar and/or poster) and written project report in terminal semester. May be repeated to a maximum of 12 semester hours. PRQ: Consent of department.

499. RESEARCH (1-6). Individual study of problems in experimental or theoretical chemistry. Includes laboratory safety training, instruction in the use of electronic library materials, and ethical conduct of research. Presentation of research results (oral seminar and/or poster) and a written capstone thesis in terminal semester. May be repeated to a maximum of 12 semester hours

Chemistry and Biochemistry Faculty

Jon W. Carnahan, Ph.D., University of Cincinnati, professor, chair

Marc V. Adler, Ph.D., Duke University, assistant professor

Gary M. Baker, Ph.D., Purdue University, associate professor

David S. Ballantine, Jr., Ph.D., University of Maryland, associate professor

Robert F. Cunico, Ph.D. Purdue University, professor emeritus

James E. Erman, Ph.D., Massachusetts Institute of Technology, Distinguished Research Professor, professor emeritus

Elizabeth R. Gaillard, Ph.D., University of Texas, Presidential Research Professor

Thomas M. Gilbert, Ph.D., University of California, Berkeley, associate professor

Stephen K. Gray, Ph.D., University of California, Berkeley, adjunct associate professor

Timothy Hagen, Ph.D., University of Wisconsin-Milwaukee, assistant professor

Heike Hofstetter, Ph.D., University of Tübingen, adjunct associate professor

Oliver Hofstetter, Ph.D., University of Tübingen, associate professor

James Horn, Ph.D., University of Iowa, associate professor

Narayan S. Hosmane, Ph.D., Edinburgh University, Distinguished Research Professor, Board of Trustees Professor

Dennis Kevill, Ph.D., University College, London, Distinguished Research Professor, professor emeritus

Douglas Klumpp, Ph.D., Iowa State University, professor

Chhiu-Tsu Lin, Ph.D., University of California, Los Angeles, Distinguished Teaching Professor, Distinguished Research Professor, Board of Trustees Professor

W. Roy Mason, Ph.D., Emory University, professor emeritus

Michael Papka, Ph.D., University of Chicago, associate 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, professor

Lidia B. Vitello, Ph.D., Clarkson College of Technology, adjunct associate professor

Tao Xu, Ph.D., University of Alabama, associate professor

Chong Zheng, Ph.D., Cornell University, professor

Department of Communication (COMS, JOUR)

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 educator licensure; 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 rhetoric and public communication is a broad-based program of study that allows students to take courses from across the field of communication. By becoming more articulate communicators and more alert critics of information and argument, students gain the leadership skills and knowledge essential in a variety of business and civic settings. The emphasis also provides a strong preparation for students who intend to pursue graduate and/or law school.

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, advertising, as well as 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Rhetoric and Public Communication

Requirements in Department (36-37)

- COMS 200 - Advanced Public Speaking (3),
OR COMS 300 - Speech Writing (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 305 - Argumentation and Debate (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)
- One of the Following (3)
 - COMS 200¹ - Advanced Public Speaking (3)
 - COMS 201 - Group Discussion Skills (3)
 - COMS 203 - Interpersonal Communication Skills (3)
 - COMS 300¹ - Speech Writing (3)
 - COMS 309¹ - Performance in Speech Communication (3)
 - COMS 355 - Media Writing (3)
 - COMS 357 - Introduction to Studio Production (4)
 - COMS 359 - Interactive Media Production I (4)
 - COMS 361 - Business and Professional Speaking (3)
 - COMS 497 - Internship (3)
 - JOUR 200A or JOUR 200B - Basic News Writing (3)
 - JOUR 312 - Graphics of Communication (3)
- Five of the Following (15)
 - COMS 220 - Rhetoric and Public Issues (3)
 - COMS 230 - Rhetoric and the Media (3)
 - COMS 302 - Introduction to Organizational Communication Theory (3)
 - COMS 303 - Introduction to Interpersonal Communication Theory (3)
 - COMS 304 - Introduction to Persuasion Theory (3)
 - COMS 356 - Critical Interpretation of Film/Television (3)
 - COMS 362 - Intercultural Communication (3)
 - COMS 370 - Principles of Advertising (3)
 - COMS 380 - Corporate Advocacy and Issue Management (3)
 - COMS 401 - Criticism of Public Rhetoric (3)
 - COMS 402 - Group Communication (3)
 - COMS 404 - Communication Theories (3)
 - COMS 405 - Advanced Interpersonal Communication (3)
 - COMS 410 - Communication and Gender (3)
 - COMS 419¹ - Political Communication in America (3)
 - COMS 460 - Television Theory and Criticism (3)
 - COMS 462 - Film Theory and Criticism (3)
 - COMS 465 - Computer-Mediated Communication (3)
 - COMS 470 - Campaign Strategies and Development (3)
 - COMS 480 - Communication and Conflict Management (3)
 - COMS 481 - Communication Ethics in Organizations (3)
 - COMS 491 - Methods of Research in Communication (3)
 - COMS 492 - Special Topics in Media Production (3)
 - COMS 493 - Special Topics in Media Studies (3)
 - COMS 496C - Special Topics in Communication Theory (3)
 - COMS 496R¹ - Special Topics in Rhetoric (3)
 - COMS 498A* - Independent Study (1-3)
 - COMS 498B - Media Production Independent Study (1-3)
 - JOUR 335 - Principles of Public Relations (3)
 - JOUR 435 - Advanced Public Relations (3)
 - JOUR 483 - Mass Media in Modern Society (3)

* Course must be taken for 3 semester hours to be counted in choice block.

¹ If not used to fulfill requirement above.

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, Rhetoric and Public Communication: 36-49 (B.A.) OR 46-52 (B.S.)

Emphasis 2. Media Studies**Requirements in Department (35-37)**

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 (4),
OR COMS 358 - Introduction to Field Production (4),
OR COMS 359 - Interactive Media Production I (4)
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)
Five courses from the following (15-17)
Of these 15-17 semester hours, no more than 9 may be at the 300 level. 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 357¹ - Introduction to Studio Production (4),
COMS 358¹ - Introduction to Field Production (4)
COMS 359¹ - Interactive Media Production I (4)
COMS 364X - Television News Producing and Directing (3)
COMS 370 - Principles of Advertising (3)
COMS 380 - Corporate Advocacy and Issue Management (3)
COMS 390 - Major Directors (3)
COMS 392 - Special Topics in Media Production (3). This course can only be taken once.
COMS 419 - Political Communication in America (3)
COMS 426 - Advanced Document Field Production (3)
COMS 427 - Advanced Narrative Field Production (3)
COMS 436 - Advanced Post Production (3)
COMS 446 - Designing for the Internet (3)
COMS 449 - Advanced Audio Production (3)
COMS 454 - Transnational Communication and Media (3)
COMS 456C - History of Film (3)
COMS 456D - History of Film (3)
COMS 457 - The Documentary Tradition (3)
COMS 459 - History of Broadcasting (3)
COMS 460 - Television 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 469 - Interactive Media Production II (3)
COMS 470 - Campaign Strategies and Development (3)
COMS 491 - Methods of Research in Communication (3)
COMS 492 - Special Topics in Media Production (3)
COMS 493 - Special Topics in Media Studies (3).
COMS 497 - Internship (3)
COMS 498A - Independent Study (1-3)
COMS 498B - Media Production Independent Study (1-3)

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: 35-49 (B.A.) OR 45-52 (B.S.)

Emphasis 3. Organizational/Corporate Communication**Requirements in Department (34)**

COMS 200 - Advanced Public Speaking (3),
OR COMS 220 - Rhetoric and Public Issues (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 Communication 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 404 - Communication Theories (3),
OR COMS 405 - Advanced Interpersonal Communication (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 (3)
COMS 403 - Freedom of Speech and Communication Ethics (3),
OR COMS 455 - Media Law and Ethics (3),
OR COMS 481 - Communication Ethics in Organizations (3),
OR JOUR 480 - Journalism Law and Regulation (3)
COMS 407 - Practicum (1)
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: 35-47 (B.A.) OR 45-50 (B.S.)

Recommendations

See departmental adviser for recommended courses in areas such as economics, English, journalism, political science, psychology, and sociology.

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.

¹ If not used to fulfill requirement above.

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. To reflect the move towards convergence in the journalism professions, as well as the types of skills news media professionals value most, the journalism program offers students the opportunity to gain experience working in specific media (such as print journalism, broadcast journalism, and digital photography) and encourages them to develop expertise in more than one area of the field. The curriculum also emphasizes ethics, critical thinking skills, and the important role journalists play in society.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (36)

Required Courses: (6)

JOUR 200A OR JOUR 200B - Basic News Writing (3)

JOUR 480 - Journalism Law and Regulation (3),

OR COMS 455 - Media Law and Ethics (3)

Constructing Media Narratives: Choose 4 of the following: (12)

JOUR 301 - Article Writing (3)

JOUR 302 - News Reporting (3)

JOUR 315 - Press Photography (3)

JOUR 354 - Fundamentals of Broadcast News (3)

JOUR 355 - Television News Writing and Reporting (3)

JOUR 357 - Advanced Practices in Television News (3)

JOUR 360 - Public Relations Writing (3)

JOUR 401 - Editorial and Opinion Writing (3)

JOUR 402 - Advanced Reporting (3)

JOUR 415 - Advanced Photojournalism (3)

JOUR 435 - Advanced Public Relations (3)

JOUR 460 - Specialized Press Writing (3)

JOUR 485A - Topics in Journalism Writing (3)

Editing and Management: Choose 2 of the following: (6)

JOUR 210 - Information Gathering in the Digital Age (3)

JOUR 312 - Graphics of Communications (3)

JOUR 356 - Electronic News Gathering and Editing (3)

JOUR 364 - Television News Producing and Directing (3)

JOUR 410 - News Editing (3)

JOUR 461 - Specialized Press Editing (3)

News in Society: Choose 4 of the following: (12)

JOUR 201 - Issues in Journalism (3)

JOUR 295 - Reading News Critically (3)

JOUR 335 - Principles of Public Relations (3)

JOUR 350 - Environment, Health, and the Media (3)

JOUR 407 - Media Convergence (3)

JOUR 436 - Public Relations Problems (3)

JOUR 449 - Media Management and Society (3)

JOUR 481 - History of Journalism (3)

JOUR 482 - International News Communications (3)

JOUR 483 - Mass Media in Modern Society (3)

JOUR 485B - Topics in Journalism and Society (3)

JOUR 486 - Journalism Ethics (3)

JOUR 487 - News and Entertainment (3)

JOUR 490 - Ethnic Minorities and the News Media (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 Major in Journalism: 30-42 (B.A.)
OR 40-45 (B.S.)**

Special Requirements

At least 80 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 S or better in all required journalism courses. Journalism prerequisites are deemed to be met only by obtaining a grade of C or S or better. It is necessary to repeat a journalism course in which a grade below C or S 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 the department's communication studies course offerings numbered 200 or above; these hours may include a maximum of 6 hours of 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.

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 educator licensure in another field of study. See list of initial educator licensure programs in the "Educator Licensure Requirements" section of this catalog. It is strongly recommended that the initial licensure be in English.

COMS 100 - Fundamentals of Oral Communication (3)

Five of the following (15)

COMS 200 - Advanced 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 licensure officer for initial educator licensure in another field of study or who already possess a valid secondary educator licensure (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 (21)

Journalism minors must earn a grade of C or S 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 S or better. (It is necessary to repeat a journalism course in which a grade below C or S is earned, before taking any course for which it is a prerequisite.)

Required courses (6)

JOUR 200A - Basic News Writing (3),

OR JOUR 200B - Basic News Writing (3)

JOUR 480 - Journalism Law and Regulation (3),

OR COMS 455 - Media Law and Ethics (3)

News Writing: Choose one of the following (3)

JOUR 301 - Article Writing (3)

JOUR 302 - News Reporting (3)

JOUR 355 - Television Newswriting and Reporting (3)

JOUR 360 - Public Relations Writing (3)

JOUR 401 - Editorial and Opinion Writing (3)

JOUR 485A - Topics in Journalism Writing (3)

Constructing Media Narratives: Choose one of the following (3)

JOUR 315 - Press Photography (3)

JOUR 354 - Fundamentals of Broadcast News (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)

JOUR 460 - Specialized Press Writing (3)

Editing and Management: Choose one of the following (3)

JOUR 210 - Information Gathering in the Digital Age (3)

JOUR 312 - Graphics of Communications (3)

JOUR 356 - Electronic News Gathering and Editing (3)

JOUR 364 - Television News Producing and Directing (3)

JOUR 410 - News Editing (3)

JOUR 461 - Specialized Press Editing (3)

News in Society: Choose one of the following (3)

JOUR 201 - Issues in Journalism (3)

JOUR 295 - Reading News Critically (3)

JOUR 335 - Principles of Public Relations (3)

JOUR 350 - Environment, Health, and the Media (3)

JOUR 407 - Media Convergence (3)

JOUR 436 - Public Relations Problems (3)

JOUR 449 - Media Management (3)

JOUR 481 - History of Journalism (3)

JOUR 482 - International News Communications (3)

JOUR 483 - Mass Media in Modern Society (3)

JOUR 485B - Topics in Journalism and Society (3)

JOUR 486 - Journalism Ethics (3)

JOUR 487 - News and Entertainment (3)

JOUR 490 - Ethnic Minorities and the News Media (3)

Elective from JOUR courses listed above (3)

Six or more semester hours in the minor must be taken at NIU.

Certificate of Undergraduate Study

Digital Media Production

This certificate is designed to provide preprofessional study in digital media production including narrative, documentary, television, and interactive media production arts. 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 2.00 in all certificate courses, and complete all certificate course work within six calendar years. Some courses may have prerequisites that are not part of the certificate curriculum. 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 Communication reserves the right to limit enrollment in any of the certificate courses.

Requirements in Department (14)

Two of the following:

COMS 349 - Introduction to Audio Production (4)

COMS 357 - Introduction to Studio Production (4)

COMS 358 - Introduction to Field Production (4)

COMS 359 - Interactive Media Production I (4)

COMS 392 - Special Topics in Media Production (3)

Course work from the following, with consent of production faculty adviser, as needed to complete a minimum of 14 credit hours.

COMS 426A - Advanced Documentary Field Production (3)

COMS 426B - Advanced Narrative Field Production (3)

COMS 463 - Advanced Studio Production (3)

COMS 466 - Narrative Scriptwriting (3)

COMS 469 - Interactive Media Production II (3)

COMS 492 - Special Topics in Media Production (3)

COMS 498B - Media Production Independent Study (1-3)

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. ADVANCED 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.

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.

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.

230. RHETORIC AND THE MEDIA (3). Role of media messages in selecting, structuring, and presenting versions of reality. Effects on individuals and society.

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 nonprint 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 multilayered 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 COMMUNICATION 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.

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.

349. INTRODUCTION TO DIGITAL AUDIO PRODUCTION (4). Introduction to digital audio recording; audio editing and enhancement; field recording techniques and introduction to digital mixing.

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 (4). Examination and application of principles of studio production, including articulation of visual and audio media, as well as an introduction to digital editing.

358. INTRODUCTION TO FIELD PRODUCTION (4). 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.

359. INTERACTIVE MEDIA PRODUCTION I (4). 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. 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.

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.

390. MAJOR DIRECTORS (3). Focus on the work of a major film director using the auteur theory. Artistry, vision, and social importance will be examined against the institutional background of film production. Repeatable up to six hours if subject is different.

392. SPECIAL TOPICS IN MEDIA PRODUCTION (3). Topics will vary. May be repeated to a maximum of 6 hours.

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. 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 (1-3). 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 DOCUMENTARY FIELD PRODUCTION (3). Video production based on application of appropriate theories and aesthetics for documentary production. Projects utilize digital editing, audio track mixing, digital video camera(s), and locations as needed. PRQ: COMS 358 and COMS 457 and successful portfolio review or consent of department.

427. ADVANCED NARRATIVE FIELD PRODUCTION (3). Video production based on application of appropriate theories and aesthetics for narrative production. Projects utilize digital editing, audio track mixing, digital video camera(s), and locations as needed. PRQ: COMS 358 and successful portfolio review or consent of department.

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. 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. PRQ: COMS 359.

449. ADVANCED AUDIO PRODUCTION (3). Advanced production of radio programs or other advanced audio projects of a complex nature, emphasizing recording, editing, and mixing techniques. PRQ: COMS 349 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.

456C. HISTORY OF FILM (3). History of film before 1950.

456D. HISTORY OF FILM (3). History of film after 1950.

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. TELEVISION THEORY AND CRITICISM (3). Major theoretical and critical perspectives for analysis of television.

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. PRQ: COMS 355 and COMS 357 and COMS 358 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.

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. 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. PRQ: COMS 303.

481. COMMUNICATION ETHICS IN ORGANIZATIONS (3). Study of communication ethics in organizational contexts. Examines major communication ethics issues and strategies for addressing unethical communication in the workplace.

491. METHODS OF RESEARCH IN COMMUNICATION (3). Research in communication with emphasis on methodology. Methodological focus varies. Course requires a research paper or project. PRQ: Junior standing and COMS 252.

492. SPECIAL TOPICS IN MEDIA PRODUCTION (3) May be repeated to a maximum of 6 semester hours when topic varies.

493. SPECIAL TOPICS IN MEDIA STUDIES (3) May be repeated to a maximum of 6 semester hours when topic varies.

495A. SENIOR THESIS (1-3). Synthesis of theories, methods, and skills in the discipline of communication studies as exhibited through a thesis. Majors only. PRQ: COMS 252 and senior standing.

495B. SENIOR PORTFOLIO (1-3). Synthesis of competencies, abilities, and accomplishments during student careers using portfolio production methods and techniques with particular focus on digital formats for distribution by CD, DVD, or the Web. Especially relevant for those seeking employment. Majors only. PRQ: COMS 252 and senior standing.

496A. SPECIAL TOPICS IN INTERPERSONAL COMMUNICATION AND PERSONAL RELATIONSHIPS (1-3). May be repeated to a maximum of 6 hours when topic varies. PRQ: COMS 303.

496B. SPECIAL TOPICS IN ORGANIZATIONAL COMMUNICATION (1-3). May be repeated to a maximum of 6 hours when topic varies. PRQ: COMS 302.

496C. SPECIAL TOPICS IN COMMUNICATION THEORY (1-3). May be repeated to a maximum of 6 semester hours when topic varies.

496D. SPECIAL TOPICS IN PERSUASION AND SOCIAL INFLUENCE (1-3). May be repeated to a maximum of 6 hours when topic varies. PRQ: COMS 304.

496R. SPECIAL TOPICS IN RHETORIC (3). May be repeated to a maximum of 6 semester hours when topic varies.

497. INTERNSHIP (3-9). 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.

498A. INDEPENDENT STUDY (1-3). Directed study and research. May be repeated to a maximum of 6 semester hours.

498B. MEDIA PRODUCTION INDEPENDENT STUDY (1-3). Directed study and research in media production. May be repeated to a maximum of 6 semester hours.

Journalism (JOUR)

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 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 200A. PRQ: ENGL 104 or ENGL 105.

201. ISSUES IN JOURNALISM (3). Introduction to journalism as a professional activity. Topics include the relationship between journalism and democracy, current debates about the role and performance of journalism organizations, the changing organization and structure of journalistic labor, and basic conventions of journalism as a form of information gathering and writing.

210. INFORMATION GATHERING IN THE DIGITAL AGE (3). Strategies for gathering research information ethically and legally from a variety of sources: libraries, government and private institutions and think tanks, human rights web sites, statistical databases, historical documentary sources, photographic collections, media collections, polls/surveys, and subject specialists. Special attention to Internet databases as journalistic tools for finding and accessing information efficiently. Critical thinking skills will be employed to select, evaluate, synthesize, organize, edit, and present information.

295. READING NEWS CRITICALLY (3). Introduction to a number of critical perspectives on the structural elements of news and of the organizations that produce it. Examination of news narratives in order to identify familiar storylines and examination of how these stories create and maintain cultural and political beliefs. Exploration of patterns in the production and consumption of news, and their relationship to social power arrangements.

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 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 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. Introduction to the fundamentals of digital camera operation, photo composition, photo editing in Photoshop, and color printing. Introduction to the ethical visual representation of documentary photographs, as well as to ethical photo editing practices required in professional photography. 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.

350. ENVIRONMENT, HEALTH, AND THE MEDIA (3). Introduction to techniques for analyzing environmental and health news. Exploration of methods for evaluating various information sources and the scientific validity of environmental and health news, while understanding the social and political impact of environmental and health journalism in perceiving risk and deriving solutions.

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 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 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 200A or JOUR 200B and JOUR 312 and JOUR 335.

364. TELEVISION NEWS PRODUCING AND DIRECTING (3). 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 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 or consent of department.

407. MEDIA CONVERGENCE (3). Development, structure, and future of converged media. Examination of how media have changed and the future of media with focus on social, political, and economic effects of convergence. Techniques for reporting, producing, and managing news in multiple platforms.

410. NEWS EDITING (3). Advanced practice in editing and headline construction for print media, and in newspaper and newsletter page design. PRQ: JOUR 200A or JOUR 200B.

415. ADVANCED PHOTOJOURNALISM (3). Advanced techniques of digital photography. This course builds on the skills taught in JOUR 315 (Digital camera operation, photo composition, photo editing in Photoshop, and color printing.) Students are introduced to specialized color photography under different conditions, such as night photography, snow photography, and close-up photography. Students write illustrated papers on well-known photographers. Students are supplied with professional equipment. 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.

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 200A or JOUR 200B. or consent of department.

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 historical/societal 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.

485A. TOPICS IN JOURNALISM WRITING (3). In-depth study and discussion of current topics of special importance and interest in the field of journalism writing, including the background of the topics and their relationship to other fields. May not be repeated. PRQ: Written permission from the faculty member coordinating the work.

485B. TOPICS IN JOURNALISM AND SOCIETY (3). In-depth study and discussion of current topics of special importance and interest in the field of journalism and society, including the background of the topics and their relationship to other fields. May not be repeated. PRQ: Written permission from the faculty member coordinating the work.

486. JOURNALISM ETHICS (3). Conceptual perspectives for ethical decision making in a journalistic setting. Surveys of historical examples of media criticism from an ethical perspective. Consideration of contemporary controversies in journalism ethics. PRQ: Junior standing.

487. NEWS AND ENTERTAINMENT (3). Intersection of news and entertainment and its implications for journalists and media practitioners through media analyses and criticism. Examination of the intersection as it relates to cultural citizenship, politics, and journalistic norms and practices. PRQ: Junior standing.

490. ETHNIC MINORITIES AND THE NEWS MEDIA (3). Development of the press of various European 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 is also examined. 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 (1-4). 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.

496. 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

Gary Burns, Ph.D., Northwestern University, professor, chair
Gretchen Bisplinghoff, Ph.D., Northwestern University, assistant professor

Robert Brooke, Ph.D., University of Minnesota, professor
Ferald J. Bryan, Ph.D., University of Missouri, associate professor
Kate Cady, Ph.D., University of Iowa, associate professor
Randy Caspersen, M.F.A., Columbia College, assistant professor
Jeffrey P. Chown, Ph.D., University of Michigan, Distinguished Teaching Professor, Board of Trustees Professor

David Gunkel, Ph.D., DePaul University, Presidential Teaching Professor

Janice D. Hamlet, Ph.D., Ohio State University, associate professor
Johanna Hartelius, Ph.D., University of Texas at Austin, assistant professor

David Henningsen, Ph.D., University of Wisconsin, professor
Mary Lynn Henningsen, Ph.D., University of Wisconsin, associate professor

Richard Holt, Ph.D., University of Illinois, professor
Betty La France, Ph.D., Michigan State University, associate professor

Jimmie Manning, Ph.D., University of Kansas, assistant professor
Robert Miller, Ph.D., Northwestern University, associate professor
Joseph Scudder, Ph.D., Indiana University, Presidential Teaching Professor

Kathleen S. Valde, Ph.D., University of Iowa, associate professor
Laura Vazquez, Ph.D., Northwestern University, Board of Trustees Professor

Karen Whedbee, Ph.D., University of Wisconsin, associate professor

Kerith Woodyard, Ph.D., University of Utah, associate professor

Journalism

William Cassidy, Ph.D., University of Oregon, associate professor
Sabryna Cornish, Ph.D., University of Illinois, Urbana-Champaign, assistant professor

Orayb Najjar, Ph.D., Indiana University, professor

Mehdi Semati, Ph.D., University of Missouri-Columbia, associate professor

Craig Seymour, Ph.D., University of Maryland, College Park, associate 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 software development, enterprise software, or computational software.

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Software Development

Requirements in Department (45-48)

CSCI 240 - Computer Programming in C++ (4)
 CSCI 241 - Intermediate Programming (4)
 CSCI 330 - UNIX and the Network Programming (4)
 CSCI 340 - Data Structures and Algorithm Analysis (4)
 CSCI 360 - Computer Programming in Assembler Language (4)
 CSCI 463 - Computer Architecture and Systems Organization (4)
 CSCI 466 - Databases (4)
 CSCI 467 - Introduction to Software Engineering (4)
 CSCI 480 - Principles of Operating Systems (4)
 One additional computer science course numbered CSCI 300 (3-4)
 Two additional computer science courses numbered CSCI 390 or above (6-8)

Requirements outside Department (9-15)

MATH 206 - Introductory Discrete Mathematics (3)
 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, Software Development: 54-63

Emphasis 2. Enterprise Software

Requirements in Department (46-48)

CSCI 240 - Computer Programming in C++ (4)
 CSCI 241 - Intermediate Programming (4)

CSCI 330 - UNIX and the Network Programming (4)
 CSCI 340 - Data Structures and Algorithm Analysis (4)
 CSCI 360 - Computer Programming in Assembler Language (4)
 CSCI 463 - Computer Architecture and Systems Organization (4)
 CSCI 465 - Enterprise Application Environments (4)
 CSCI 466 - Databases (4)
 CSCI 467 - Introduction to Software Engineering (4)
 CSCI 480 - Principles of Operating Systems (4)
 One additional computer science course numbered above CSCI 300 (3-4)
 One additional computer science course numbered above CSCI 390 or above (3-4)

Requirements outside Department (18-27)

ACCY 288 - Fundamentals of Accounting (3),
 OR ACCY 206 - Introductory Financial Accounting (3), and
 ACCY 207 - Introductory Cost Management (3)
 MATH 206 - Introductory Discrete Mathematics (3)
 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)
 Two of the following (6)
 FINA 320 - Principles of Finance (3)
 MGMT 320 - Foundations of Business and Entrepreneurship (3)
 MGMT 327 - Creativity, Innovation, and Entrepreneurship (3)
 MGMT 333 - Principles of Management (3)
 MKTG 310 - Principles of Marketing (3)

Total Hours for Emphasis 2, Enterprise Software: 64-75

Emphasis 3. Computational Software

Requirements in Department (45-47)

CSCI 240 - Computer Programming in C++ (4)
 CSCI 241 - Intermediate Programming (4)
 CSCI 330 - UNIX and the Network Programming (4)
 CSCI 340 - Data Structures and Algorithm Analysis (4)
 CSCI 360 - Computer Programming in Assembler Language (4)
 CSCI 462 - Foundations of Computer Science (3)
 CSCI 463 - Computer Architecture and Systems Organization (4)
 CSCI 466 - Databases (4)
 CSCI 467 - Introduction to Software Engineering (4)
 CSCI 480 - Principles of Operating Systems (4)
 One additional computer science course numbered above CSCI 300 (3-4)
 One additional computer science course numbered CSCI 390 or above (3-4)

Requirements outside Department (32-33)

MATH 206 - Introductory Discrete Mathematics (3)
 MATH 229, 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 - Numerical Linear Algebra (3)
 MATH 435 - 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, Computational Software: 77-80

Minor in Computer Science (21-24)

CSCI 240 - Computer Programming in C++ (4)
 CSCI 241 - Intermediate Programming (4)
 One CSCI course numbered 290 or above (3-4)
 One CSCI course numbered 400 or above (3-4)
 MATH 110 - College Algebra (3)
 MATH 206 - Introductory Discrete Mathematics (3), MATH 210 - Finite Mathematics (3), MATH 211 - Calculus for Business and Social Science (3), OR MATH 229 - Calculus I (4)
 One of the following courses:
 CSCI 330 - UNIX and the Network Programming (4)
 CSCI 360 - Computer Programming in Assembler Language (4)
 Six or more semester hours in the minor must be taken at NIU.

Certificate of Undergraduate Study

Mobile Programming

This certificate is designed to provide study in programming mobile devices such as the iPhone, iPad, Droid phones, and Microsoft phones. The certificate is open to all undergraduates. Students must maintain good academic standing in the university, achieve a minimum grade of C in each certificate course, and complete all certificate course work within six calendar years. All course requirements for the certificate must be completed at NIU. Depending upon a student's prior programming background, successful completion of deficiency courses may be required before the student is allowed to enroll in any certificate courses. With department approval, some or all of the certificate courses may be applied toward undergraduate degree requirements in the department. The Department of Computer Science reserves the right to limit enrollment in any of the certificate courses. Students should consult with the undergraduate certificate advisor prior to registering for any courses.

Requirements (14)

CSCI 427 - Advanced Application Design for Mobile Devices (3)
 CSCI 428 - Advanced Programming Topics for Mobile Devices (3)
 Two of the following:
 CSCI 321 - iOS Mobile Device Programming (4)
 CSCI 322 - Android Mobile Device Programming (4)
 CSCI 323 - Microsoft Mobile Device Programming (4)

Course List

180. COMPUTERS AND TECHNOLOGY (3). Role and function of computers and information technology in the world today. Principles underlying everyday software, the World Wide Web, open source and copyright issues, and database privacy and security. Laboratory experiences will include use of commonly used software.

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, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229; 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, MATH 155, MATH 206, MATH 210, MATH 211, or MATH 229; 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, 155, 206, 210, 211, or 229; or consent of department.

241. INTERMEDIATE PROGRAMMING (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 with a grade of C or better, 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 or CSCI 475.

290. TOPICS AND INNOVATIONS IN COMPUTER SCIENCE (3). Topics of interest to non-majors in computer science. Contact department for specific topic in a given semester. Examples include computers in art, music, and dance; the myth of the paperless office; the facts about computerized voting machines; and game programming for non-majors. May be repeated to a maximum of 6 semester hours as subject varies. PRQ: MATH 110 or consent of department.

297. DIRECTED STUDY (1-3). Selected readings or projects to supplement lower-division CSCI courses. May be repeated to a maximum of 3 semester hours. PRQ: Consent of department.

321. iOS MOBILE DEVICE PROGRAMMING (4). Comprehensive introduction to building applications for mobile devices that use Apple's iOS operating system. Topics covered will include application of Model-View-Controller design architecture, database and web services, graphics, multithreading, networking and interaction with hardware sensors. Extensive laboratory work. PRQ: CSCI 241 or consent of department.

322. ANDROID MOBILE DEVICE PROGRAMMING (4). Android application programming including use of a standard integrated development environment, debugging, user interface creation, and multithreading and network applications. Instruction in coding, running, and debugging a variety of applications using software emulators as well as tethered hardware devices. Extensive laboratory work. PRQ: CSCI 241 or consent of department.

323. MICROSOFT MOBILE DEVICE PROGRAMMING (4). Comprehensive introduction to building Microsoft phone applications. Includes extensive programming in C#. Technical topics include user interface design, navigation, debugging, hardware sensors and web services. Extensive laboratory work. PRQ: CSCI 241 or consent of department.

330. UNIX AND NETWORK PROGRAMMING (4). UNIX system usage and commands. Shell script programming. Network programming concepts and protocols. System call level and basic network programming in C++. Extensive laboratory work. PRQ: CSCI 240.

340. 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. Extensive laboratory work. PRQ: CSCI 241, or consent of department.

350. COMPUTER SECURITY BASICS (3). Hands-on course covering basic computer security problems, and the tools (including encryption) available for dealing with them.

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 CSCI 390 and/or CSCI 496 credit can be counted toward NIU's required hours for graduation or toward NIU's 40 upper-division hour requirement. PRQ: Declared computer science major, CSCI 340 or CSCI 360, and consent of department.

427. ADVANCED APPLICATION DESIGN FOR MOBILE DEVICES (3). Principles of advanced application design for mobile devices. Focus on the application's user experience and value to the user. Includes design principles for applications that are intended to run on multiple mobile device platforms. Includes extensive programming in Objective-C, Java, or C#. Extensive laboratory work. PRQ: Two of the following: CSCI 321, CSCI 322, or CSCI 323, or consent of department.

428. ADVANCED PROGRAMMING TOPICS FOR MOBILE DEVICES (3). In-depth coverage of advanced topics in programming mobile devices. Topics include exception handling, memory and thread management, and external data portals. Design principles for applications that are intended to run on multiple mobile device platforms. Includes extensive programming in Objective-C, Java, or C#. Extensive laboratory work. PRQ: Two of the following: CSCI 321, CSCI 322, or CSCI 323, or consent of department.

446. FOUNDATIONS OF ENTERPRISE COMPUTING (3). Survey of major topics and the state of the art in the field of modern enterprise computing including enterprise-level system architecture, system integration, interoperation, security, end-to-end enterprise solution delivery, XML, Web services and SOA, Grid computing, and mobile computing. PRQ: CSCI 340.

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. FOUNDATIONS OF COMPUTER SCIENCE (3). Introduction to mathematical languages, automata theory, and the theory of recursive functions and computability. PRQ: MATH 206 or MATH 211 or MATH 229; and CSCI 240.

463. COMPUTER ARCHITECTURE AND SYSTEMS ORGANIZATION (4). Organization and use of computer systems. Basic concepts and examples from microcomputers and networks, peripheral components, data communications, and the relationship between hardware components and the operating system. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

464. DATA STRUCTURES IN ASSEMBLY LANGUAGE (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. ENTERPRISE APPLICATION ENVIRONMENTS (4). File, organization, job control languages, file access methods and utilities. Security. High-throughput data-intensive applications. Extensive laboratory work. PRQ: CSCI 360 or consent of department.

466. DATABASES (4). Software development in a representative current database system. Extensive laboratory work. PRQ: CSCI 241 or equivalent or consent of department.

467. INTRODUCTION TO SOFTWARE ENGINEERING (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. PRQ: CSCI 340 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 340 or consent of department.

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. Extensive laboratory work. PRQ: CSCI 340, or consent of department.

475. WEB DEVELOPMENT (3). Examination of client-side web 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 340, or consent of department.

476. WEB DEVELOPMENT (SERVERSIDE) (3). Examination of serverside web application development. Technical topics include a survey of serverside programming languages and frameworks. Includes designing and implementing a web application system using one of the frameworks. Extensive laboratory work. PRQ: CSCI 340, or consent of department.

480. PRINCIPLES OF OPERATING SYSTEMS (4). Principles and practices of modern operating system design. Includes file systems organization; memory management; multitasking; windowing interfaces; interprocess communication, including communications across a network; and client-server models of processing. Extensive laboratory work. PRQ: CSCI 340 and CSCI 463, 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 9 semester hours when subject changes. Students may repeat multiple lettered topics, each to its maximum. PRQ: Senior standing and consent of department.

496. RESEARCH AND DEVELOPMENT INTERNSHIP (1-6). Work as a paid intern. Reading and preparation of a paper under faculty supervision. May be repeated. No more than 3 semester hours in CSCI 496 may be included in the baccalaureate degree. S/U grading. PRQ: Declared computer science major and consent of department. Consent is competitive.

497. UNDERGRADUATE READINGS IN COMPUTER SCIENCE (1-3). Individual readings in computer science. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department.

499. SENIOR HONORS CAPSTONE (1-3). Preparation of an independent study honors project under the guidance of a faculty mentor. Will not count toward credit in the major. PRQ: Admission to the university honors program and consent of department.

Computer Science Faculty

Nicholas T. Karonis, Ph.D., Syracuse University, professor, acting chair

Kirk Duffin, Ph.D., Brigham Young University, associate professor

Raimund K. Ege, Ph.D., Oregon Graduate Institute of Science and Technology, associate professor

Reva Freedman, Ph.D., Northwestern University, associate professor

Barnett Glickfeld, Ph.D., Columbia University, associate professor

Minmei Hou, Ph.D., Pennsylvania State University, assistant professor

Ibrahim Onyuksel, Ph.D., University of Michigan, professor

Robert Zerwekh, Ph.D., University of Illinois, associate professor

Jie Zhou, Ph.D., Concordia University, associate 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 nonmajors 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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.

Professional Educator Licensure – Social Sciences: Economics

Students who want to be licensed to teach economics at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in economics.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education program when they have established a file with the History and Social Sciences Secondary Teacher Education Program 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;

passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

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;

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

obtained approval from the History and Social Sciences Secondary Teacher Education Program.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program.

Department Requirements

Students must complete the requirements for a degree in economics. In addition, they must complete ECON 496X, History and Social Science Instruction for Secondary Educators. Except in unusual circumstances, ECON 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History and Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

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 3.50 GPA or above in economics courses.

Completion of all requirements for an economics major.

A score of 90% or higher on the capstone research paper, which can be satisfied in ECON 492 or with the permission of the Undergraduate Director when taking ECON 492 is not possible, a grade of 90% or higher in ECON 498 or ECON 497.

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 nonmarket 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. Game Theory

F. Industrial Organization

G. Topics in Modern Economics

Topics of current importance to consumers, resource owners, business, and government. May be repeated up to 9 hours as topics change and can be taken concurrently. 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.

397. 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.

401X. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ANTH 401X, GEOG 401X, HIST 401, POLS 401X, PSYC 401X, and SOCI 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

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 (1-3). 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.

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.

484X. FINANCIAL DERIVATIVES (3). *Crosslisted with STAT 484.* Review of financial derivatives including futures, European and American options, Exotic options. Greeks, trading and hedging strategies. Pricing derivative security with appropriate boundary conditions, including Black-Scholes formula, binomial trees, lattice models and finite difference methods. Simulation and variance reduction techniques. Interest rate models. PRQ: STAT 483 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.

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: ECON 360 and ECON 361 or consent of department.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION FOR SECONDARY EDUCATORS (3). *Crosslisted as ANTH 496X, GEOG 496X, HIST 496, POLS 496X, PSYC 496X, and SOCI 496X.* Organization and presentation of materials for history and social science courses at the secondary levels. PRQ: Admission to the history or social science secondary teacher education program and permission of the Department of History's office of secondary teacher education.

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

Carl Campbell III, Ph.D., Princeton University, associate professor, chair

Susan Porter Hudak, Ph.D., University of Wisconsin, associate professor, assistant chair

Evan Anderson, Ph.D., University of Chicago, assistant 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

Eliakim Katz, Ph.D., London University, professor

Mohammad Mirhosseini, Ph.D., University of Illinois, assistant professor

Khan A. Mohabbat, Ph.D., State University of New York, professor

Stephen Nord, Ph.D., University of Illinois, professor emeritus

George Slotsve, Ph.D., University of Wisconsin, associate professor

Virginia Wilcox Gök, Ph.D., Washington University, professor

Wei Zhang, Ph.D., University of Wisconsin, assistant 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. Students who pass the exemption examination will be required to substitute another English course at the 100-400 level, taken at NIU or elsewhere, to complete the 39 required semester hours in the major or the 18 semester hours required in the 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Track 1. English Studies

Requirements in Department (39)

ENGL 200 - Literary Study: Research and Criticism (3)
ENGL 207 - Fundamentals of English Grammar (3)

ENGL 300A, ENGL 300B, OR ENGL 300C - Advanced Essay Composition (3),
OR ENGL 308 - Technical Writing

One of the following:

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 - Language and Gender (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 414 - The Victorian Age (3),
OR ENGL 470 - The English Novel to 1900 (3)
ENGL 471 - The English Novel Since 1900 (3),
OR ENGL 475 - British Poetry Since 1900 (3),
OR ENGL 476 - British Drama Since 1900 (3),
OR ENGL 477 - Postcolonial and New Literatures in English (3)

Three courses at the 300-400 level, selected from the above courses not used to fulfill area requirements and/or from other English courses (9)

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 Leading to Secondary Licensure in English Language Arts

These are minimum requirements. Meeting these requirements will not guarantee students admission to the program or to particular courses.

Students majoring in English who seek licensure to teach English Language Arts at the secondary level should consult with the coordinator of educator licensure in English at the earliest possible date. Undergraduate majors normally apply for admission to the program for licensure in secondary English Language Arts at the end of the sophomore year, except in the case of transfer students, who normally apply during 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 licensure without becoming a candidate for a degree should consult the coordinator of educator licensure in English as early as possible.

Admission Requirements

Application in writing to the coordinator.

Passing score on the Test of Academic Proficiency, or equivalent recognized by the Illinois State Board of Education.

Completion of at least 9 semester hours of English beyond ENGL 103-ENGL 104 or ENGL 105 at NIU, including ENGL 200, ENGL 207, and ENGL 300C, with an English GPA of at least 3.00 including a minimum grade of B in ENGL 300C and a minimum grade of C in all other English classes used in the calculation of the ENGL GPA. All undergraduate educator licensure candidates in English Language Arts are required to complete ENGL 207 with a minimum grade of C.

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 103-ENGL 104 or ENGL 105 at NIU. They must obtain a grade of B or better in ENGL 404, ENGL 479, ENGL 480, and ENGL 482 and have a satisfactory review of progress with the coordinator each semester. Courses listed below are aligned with Illinois Professional Teaching Standards and the National Council of Teachers of English standards for preparation of teachers of Secondary English Language Arts. Educator licensure candidates should save appropriate evidence of content-area knowledge.

Requirements in Department (39)

ENGL 200 - Literary Study: Research and Criticism (3)

ENGL 207 - Fundamentals of English Grammar (3)

ENGL 300C - Advanced Essay Composition (3)

ENGL 310 - Literary Classics (3)

ENGL 322 - Language in American Society (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 477 - Postcolonial and New Literatures in English (3)

ENGL 404 - Theory and Research in Written Composition for English Language Arts (3)

ENGL 479 - Theory and Research in Literature for English Language Arts (3)

ENGL 480 - Materials and Methods of Teaching Secondary English Language Arts (3)

ENGL 485 - Student Teaching in Secondary English Language Arts (3)

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 licensure should consult the coordinator as early as possible.

Total Hours for a Major in English, Track 2: 48-60

Additional Requirements

The Illinois State Board of Education specifies that candidates earn a grade of C or better in each course required for educator licensure. This requirement includes courses used to fulfill Educator Licensure in English Language Arts as an additional endorsement (see below) as well as professional education courses offered in the College of Education. NOTE: The Department of English requires that candidates for Track 2: English Studies Leading to Secondary Licensure in English Language Arts, Grades 9-12 and candidates for Middle School Licensure in English Language Arts, Grades 5-8 (see below) maintain a 3.00 English GPA (excluding First Year Composition). Track 2 candidates must maintain a 2.75 NIU cumulative GPA.

The state of Illinois requires a minimum of 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 - Introductory Clinical Experience (1) (must be taken concurrently with ENGL 404)

ILAS 301 - Second Clinical Experience (2) (must be taken concurrently with ENGL 479)

ENGL 482 - Clinical Experience in Secondary English Language Arts (1-2) (must be taken concurrently with ENGL 480)

A course in the teaching of English Language Learners

A course in the methods of teaching exceptional children (3)

Students are also required to have course work in reading instruction at the secondary level and in human growth and development. Students should consult with the educator licensure coordinator in English to determine which courses are approved for satisfying the additional requirements. Students must also pass the Illinois examination for licensure for teaching in English Language Arts and fulfill any additional state of Illinois requirements.

Requirements for Middle School Licensure in English Language Arts (27)

The following are minimum requirements. The Illinois State Board of Education strongly recommends at least 33 hours of preparation in the candidate's primary subject area of middle-school licensure.

ENGL 200 - Literary Study: Research and Criticism (3)
 ENGL 207 - Fundamentals of English Grammar (3)
 ENGL 300C - Advanced Essay Composition: Licensure in Teaching (3)
 ENGL 310 - Literary Classics (3)
 ENGL 315 - Shakespeare (3),
 OR ENGL 407 - Shakespeare (3),
 OR a 300 or 400- level course in British literature (3)
 A 300 or 400- level course in American literature (3)
 ENGL 322 - Language in American Society (3)
 ENGL 404 - Theory and Research in Written Composition for English Language Arts (3)
 ENGL 479 - Theory and Research in Literature for English Language Arts (3)

Plus a culminating methods course leading to middle-school educator licensure that aligns with the National Council of Teachers of English standards for teaching English Language Arts (3)

Requirements for Teacher Licensure in English Language Arts as an Additional Endorsement (24)

ENGL 200 - Literary Study: Research and Criticism (3)
 ENGL 207 - Fundamentals of English Grammar (3)
 ENGL 300C - Advanced Essay Composition: Licensure in Teaching (3)
 ENGL 315 - Shakespeare (3),
 OR ENGL 407 - Shakespeare
 A 300 or 400-level course in British literature (3)
 A 300 or 400-level course in American literature (3)
 ENGL 404 - Theory and Research in Written Composition for English Language Arts (3)
 ENGL 479 - Theory and Research in Literature for English Language Arts (3)

This additional endorsement will also satisfy the requirement for an English minor. The candidate must apply to the coordinator of educator licensure in English to declare the English minor.

Track 3. English Studies in Writing

Students majoring in English Studies in Writing will have flexibility to develop a general focus on professional writing, creative writing, or both. They will ground their written practice in a substantive understanding of language analysis, literary analysis, critical thinking, and the major literary genres. Students in creative writing will also earn the Certificate of Undergraduate Study in Creative Writing.

Requirements in Department (39)

ENGL 200 - Literary Study: Research and Criticism (3)
 ENGL 207 - Fundamentals of English Grammar (3)
 ENGL 300A - Advanced Essay Composition: General (3),
 OR ENGL 300B - Advanced Essay Composition: Pre-Law (3),
 OR ENGL 300C - Advanced Essay Composition: English Teacher Certification (3)

Two of the following (6)

ENGL 301 - Writing Poetry I (3)
 ENGL 302 - Writing Fiction I (3)
 ENGL 303 - Writing Creative Nonfiction (3)
 ENGL 308 - Technical Writing (3)
 ENGL 403 - Technical Editing (3)

Two of the following (6)

ENGL 250 - Practical Writing (3)
 ENGL 304 - Writing Arts Criticism (3)
 ENGL 398 - Topics in the Practice and Theory of Composition (3)
 ENGL 401 - Writing Poetry II (3)
 ENGL 402 - Writing Fiction II (3)
 ENGL 424 - Topics in Technical Writing (1-3)
 ENGL 493 - Writing Creative Nonfiction II (3)
 ENGL 496 - Internship in Writing, Editing, or Training (1-6)

One of the following (3)

ENGL 318 - Language and Linguistics (3)
 ENGL 321 - Structure of Modern English (3)
 ENGL 322 - Language in American Society (3)
 ENGL 432 - Topics in General Linguistics (3)
 ENGL 433 - Discourse Analysis (3)
 ENGL 434X - Language and Gender (3)

One of the following (3)

ENGL 374 - The American Short Story (3)
 ENGL 384 - Literary Nonfiction (3)
 ENGL 474 - The International Short Story (3)

One of the following (3)

ENGL 363 - Literature and Film (3)
 ENGL 376 - American Drama since 1900 (3)
 ENGL 407 - Shakespeare (3)
 ENGL 476 - British Drama since 1900 (3)

One of the following (3)

ENGL 377 - American Poetry since 1900 (3)
 ENGL 406 - Chaucer (3)
 ENGL 409 - Milton (3)
 ENGL 475 - British Poetry since 1900 (3)

Two other ENGL literature courses not listed above (6)

Requirements outside department (0-12)

Fulfillment of B.A. foreign language requirement (0-12)

Total hours for a Major in English, Track 3: 39-51

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.

ENGL 200 - Literary Study: Research and Criticism (3)
 ENGL 207 - Fundamentals of English Grammar (3)
 ENGL 300 - Advanced Essay Composition (3)
 Three additional courses at the 300-400 level (9)

Six or more semester hours in the minor must be taken at NIU.

Certificate of Undergraduate Study

Creative Writing (12)

This certificate is designed to provide interested students the opportunity to study the craft of writing poetry, fiction, or creative nonfiction. 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 the certificate. Students must select a single genre, and register with one of the coordinators of creative writing for approval of the program of study.

Each student will take four three-credit, upper-level (300 or higher) courses, including the introductory and advanced workshops in sequence in the chosen genre, one course in reading and analysis of the literature of that genre, and one course (excluding workshop) in a second genre.

The introductory and advanced workshop (in sequence) in the chosen genre, which serves as the foundational courses:

ENGL 301 - Writing Poetry I (3) and ENGL 401 - Writing Poetry II (3),
OR ENGL 302 - Writing Fiction I (3) and ENGL 402 - Writing Fiction II (3),
OR ENGL 303 - Writing Creative Nonfiction (3) and ENGL 493, - Writing Creative Nonfiction II (3)

Two from the following (one course must be in your selected genre, and one must be from outside your selected genre):

ENGL 304 - Writing Arts Criticism (3)
ENGL 374 - The American Short Story (3)
ENGL 375 - The American Novel (3)
ENGL 377 - American Poetry since 1900 (3)
ENGL 384 - Literary Nonfiction (3)
ENGL 471 - The English Novel since 1900 (3)
ENGL 475 - British Poetry since 1900 (3)
ENGL 400 - Literary Topics, as applicable (3-6)

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 or a score of 30 or higher on the ACT Combined English/Writing Test.

300. ADVANCED ESSAY COMPOSITION (3).

- A. General. Writing expressive, persuasive, and informative essays and developing appropriate stylistic and organizational techniques. Open to majors, minors, and non-majors.
- B. Pre-Law. Designed to meet special writing needs of the pre-law student.
- C. Licensure in Teaching. Designed to meet the special writing needs of advance the writing proficiencies especially important to students seeking licensure in either middle or high school English Language Arts. Aligned with the Common Core Standards, the Illinois Professional Teaching Standards, and the National Council of Teachers of English standards for teaching English Language Arts.

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.

350. WRITING ACROSS THE CURRICULUM (3). Practice in writing skills conventions, organization and structuring of prose forms appropriate to the humanities, social sciences, and sciences (e.g., proposals, lab reports, case studies, literature reviews, critiques). Open to majors and non-majors.

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 (1-3). 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.

493. WRITING CREATIVE NONFICTION II (3). Advanced workshop in writing creative nonfiction. The writing of personal and autobiographical essays with attention paid to extensive revision, formal and thematic experimentation, and considerations about the implications of the self as author and subject. Continues and advances the work begun in Writing Creative Nonfiction. PRQ: ENGL 303.

494. WRITING CENTER PRACTICUM (1-3). *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. S/U grading. May be repeated to a maximum of 3 semester hours with consent of department.

495. PRACTICUM IN ENGLISH (1-3). 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 (1-6). 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 Linguistics 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 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 dialects and minority languages. Relationship between language and power and social control. Aligned with the Common Core Standards, the Illinois Professional Teaching Standards, and the National Council of Teachers of English standards for teaching English Language Arts.

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. LANGUAGE AND GENDER (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.

Courses Leading to Licensure in English Language Arts

404. THEORY AND RESEARCH IN WRITTEN COMPOSITION FOR ENGLISH LANGUAGE ARTS (3). Theory and research applied to principled practices in teaching and evaluating composition in English Language Arts with emphasis on meeting Common Core Standards for writing in the multicultural classroom. Aligned with the Illinois Professional Teaching Standards and the National Council of Teachers of English standards for teaching English Language Arts. PRQ: ENGL 300C or consent of department. CRQ: ILAS 201.

479. THEORY AND RESEARCH IN LITERATURE FOR ENGLISH LANGUAGE ARTS (3). Theory and research applied to principled practices in teaching the reading of complex texts, including canonical, multicultural, young adult, and informational literature in English Language Arts. Aligned with the Common Core Standards, the Illinois Professional Teaching Standards, and the National Council of Teachers of English standards for teaching English Language Arts. 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 LANGUAGE ARTS (3). Methods, curriculum materials, and technologies essential to the teacher of English Language Arts. Emphasis on designing coherent and integrated units of instruction, including the strategic use of assessments to foster learning. Developing a variety of activities and multiple representations of concepts to accommodate diverse students' characteristics and abilities. Aligned with the Common Core Standards, the Illinois Professional Teaching Standards, and the National Council of Teachers of English standards for teaching English Language Arts. PRQ: ENGL 479 or consent of department. CRQ: ENGL 482.

482. CLINICAL EXPERIENCE IN ENGLISH LANGUAGE ARTS (1-2). Discipline-based clinical experience for students seeking licensure in English Language Arts. Practicum in teaching methods, assessment, problem solving, and on-site research. Minimum of 50 clock hours of supervised and formally evaluated experiences in the setting likely for student teaching. Includes regular on-campus meetings. PRQ: Consent of department. CRQ: ENGL 480.

485. STUDENT TEACHING IN SECONDARY ENGLISH LANGUAGE ARTS (7-12). Student teaching for one semester. Assignments arranged through the office of clinical experiences in the College of Liberal Arts and Sciences, in consultation with the coordinator of educator licensure in English Language Arts. Ongoing assessment of candidate's development. Candidates must satisfactorily complete a formal teacher performance assessment. Monthly on-campus seminars. Not available for credit in the major. S/U grading. PRQ: ENGL 480, ENGL 482, 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). Introduction to methods and terms used in the study of literature from a broad range of historical periods. Emphasis on a variety of approaches to literary analysis; terminology used in the study of literary genres of poetry, prose, and drama. Intensive practice writing analytical essays on literature. 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. 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.

384. LITERARY NONFICTION (3). Representative readings in literary nonfiction, from autobiography and memoir to the personal and lyric essay, focusing either on a period, such as modern/contemporary, or on a theme. Attention paid to literary qualities fostered in personal writing, and to form, theory, and historical and cultural contexts.

399. TOPICS IN AMERICAN LITERATURE (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.

474. THE INTERNATIONAL SHORT STORY (3). Birth and development of the short story as an international literary form. Studies short fiction by writers from around the world, from the early 19th century to the present.

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.

477. POSTCOLONIAL AND NEW LITERATURES IN ENGLISH (3). Representative works of new literatures in English by postcolonial South Asian, African, Australian, and Caribbean writers, such as Arundhati Roy, Buchi Emecheta, Ben Okri, Peter Carey, Michelle Cliff, and Derek Walcott.

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.

499. TOPICS IN ENGLISH LITERATURE (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.

491. 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.

497. DIRECTED STUDY (1-3). Directed study in any area of English studies. PRQ: Consent of department.

498. TOPICS IN ENGLISH STUDIES (1-3). 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

Amy K. Levin, Ph.D., City University of New York, professor, chair
Melissa Adams-Campbell, Ph.D., Indiana University, assistant professor

Gulsat Aygen, Ph.D., Harvard University, associate professor
William Baker, Ph.D., University of London, Distinguished Research Professor, Board of Trustees Professor

Scott Balcerzak, Ph.D., University of Florida, assistant professor
Alexandra G. Bennett, Ph.D., Brandeis University, associate professor

Betty J. Birner, Ph.D., Northwestern University, professor
Joseph W. Bonomo, Ph.D., University of Ohio, assistant 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, professor

Jeffrey P. Chown, Ph.D., University of Michigan, adjunct professor

Nicole Clifton, Ph.D., Cornell University, associate professor

Lara Crowley, Ph.D., assistant professor, University of Maryland

Timothy Crowley, Ph.D., assistant professor, University of Maryland

Michael J. Day, Ph.D., University of California, Berkeley, professor

Deborah C. De Rosa, Ph.D., University of North Carolina at Chapel Hill, associate 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, associate professor

Philip E. Eubanks, Ph.D., University of Illinois, professor

Ibis Gómez-Vega, Ph.D., University of Houston, associate professor

David Gorman, Ph.D., Columbia University, associate professor

John V. Knapp, Ph.D., University of Illinois, Ph.D., University of Wisconsin, professor

Doris M. Macdonald, Ph.D., Louisiana State University, associate professor

Brian T. May, Ph.D., University of Virginia, associate professor

Thomas McCann, Ph.D., University of Chicago, assistant professor

Amy Newman, Ph.D., University of Ohio, Presidential Research Professor

Bradley T. Peters, Ph.D., University of Iowa, professor

Kathleen Renk, Ph.D., University of Iowa, associate professor

Jessica L. Reyman, Ph.D., University of Minnesota, associate professor

Timothy Ryan, Ph.D., University of Nevada-Reno, assistant professor

John D. Schaeffer, Ph.D., St. Louis University, professor

Diana L. Swanson, Ph.D., University of Minnesota, associate professor

Mark W. Van Wienen, Ph.D., University of Illinois, professor

Environmental Studies (ENVS)

Environmental Studies seeks to (1) evaluate the nature and magnitude of environmental and climatic change at local, regional, and global scales; (2) understand and explore solutions to energy challenges; and (3) assess the impact of environmental, climatic, and energy challenges on society and contribute toward the development of a public policy that promotes sustainability.

Environmental Studies offers both a B.A. and a B.S. degree for a major in environmental studies. The major in environmental studies is designed primarily for students seeking a career in identifying the causes, scales, and remediation and mitigation approaches to major local, regional, and global environmental problems. Each student must complete the required courses of the major along with an emphasis field. Courses used to satisfy the requirements for the major may have prerequisites that are not part of the major curriculum. Several university departments participate in the major in environmental studies including anthropology, biological sciences, geography, geology, history, industrial and systems engineering, philosophy, political science, sociology, and technology.

Major in Environmental Studies (B.A. or B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Environmental Studies (18)

ENVS 301 - Environmental Science I: Physical Systems (3)
 ENVS 302 - Environmental Science II: Biological Systems (3)
 ENVS 303 - Environment in the Social Sciences and Humanities (3)
 ENVS 304 - Environmental Law, Policy and Economics (3)
 ENVS 305X - Green Technologies (3)
 Three semester hours from the following (3)
 ENVS 450 - Issues in Environmental Studies (3)
 ENVS 490 - Undergraduate Research (1-3)
 ENVS 491 - Special Topics in Environmental Studies (1-3)
 ENVS 492 - Internship in Environmental Studies (1-6)
 ENVS 498 - Senior Thesis (1-3)
 ENVS 499 - Senior Thesis: Honors (1-3)

Requirements outside Environmental Studies (B.A., 9; B.S., 15-16)

For the B.A. degree

Fulfillment of foreign language requirement (0-12)
 (See "Foreign Language Requirement for the B.A. Degree.")
 CHEM 100 - Chemistry in Everyday Life (3),
 OR PHYS 140 - Physics and Society (3),
 OR IYSE 100 - Fundamentals of Manufacturing Systems (3)
 MATH 155 - Trigonometry and Elementary Functions (3),
 OR MATH 211 - Calculus for Business and Social Science (3)
 STAT 208 - Basic Statistics (3)

For the B.S. degree

CHEM 210 - General Chemistry I (3)
 CHEM 211 - General Chemistry II (3)
 CHEM 212 - General Chemistry Laboratory I (1)
 CHEM 213 - General Chemistry Laboratory II (1),
 MATH 211 - Calculus for Business and Social Science (3),
 OR MATH 229 - Calculus I (4) and MATH 230 - Calculus II (4)
 STAT 301 - Elementary Statistics (4)

Emphasis 1. Biodiversity and Environmental Restoration (35)

The diversity of life on earth (Biodiversity) represents a resource of unknown potential for improving human welfare that is increasingly put at risk by human activities. Perhaps the most significant challenge of the 21st century is to resolve how to best utilize this resource while providing effective stewardship such that biodiversity resources are maintained for future generations. Meeting this challenge requires a detailed understanding of the processes that promote, maintain, and diminish biodiversity at all levels of biological organization, from molecules to ecosystems, a theme that unites the many subdisciplines within biology. Organisms are intimately connected to their environments and environments vary on multiple spatial and temporal scales. Hence, utilization and stewardship of biodiversity requires understanding its connection to both natural and human-induced environmental change. This emphasis is offered for the B.S. only.

Requirements outside Environmental Studies (14)

BIOS 103 - General Biology (3) AND BIOS 105 - General Biology Laboratory (1),
 OR BIOS 209 - Fundamentals of Organismal Biology (3)
 AND BIOS 211 Fundamentals of Organismal Biology Laboratory (1)
 BIOS 406 - Conservation Biology (4)
 GEOG 322 - Geography of World Plant Communities (3)
 GEOG 455 - Land-Use Planning (3)
 Select one of the following humanities and social sciences courses (3)
 ANTH 425 - Environment and Anthropology (3)
 ANTH 432 - Nature and the Environment Across Cultures (3)
 ECON 386 - Environmental Economics (3)
 HIST 377 - American Environmental History (3)
 PHIL 335 - Environmental Ethics (3)
 POLS 220 - Introduction to Public Policy (3)
 POLS 324 - Politics of Environmental, Health, and Safety Regulation (3)
 SOC 364 - Environmental Sociology (3)

Electives (18)

Students must select at least six of the following electives. At least one course must be selected from each of the following: conceptually-based courses, methods-based courses, and taxonomically-based courses. The remaining three courses must be selected from the courses listed below; if not previously used to fulfill the requirements for those categories.

Select at least one of the following conceptually-based courses (3)
 ANTH 343/ENVS 343X - Extinction: Where the Wild Things Were (3)
 ANTH 444 - Primate Ecology and Conservation (3)
 ANTH 445/BIOS 435X - Primate Evolution (3)
 BIOS 317 - Evolution (3)
 BIOS 433 - Behavioral Ecology (3)
 BIOS 439 - Molecular Evolution (3)
 BIOS 448 - Aquatic Ecology (4)
 BIOS 487 - Conservation Genetics (3)
 GEOG 422 - Plant-Soil Interactions (4)
 GEOG 453 - Environmental Management (3)
 GEOL 320 - Environments and Life Through Time (4),
 OR GEOL 322 - Paleogeography, Paleoclimatology, Paleoeology (4)
 GEOL 488 - Environmental Change (3)

Select at least one of the following methods-based courses (3)

- CHEM 427 - Environmental Chemistry (3)
- ENVS 409/BIOS 409X/GEOL409X - Water Quality (4)
- GEOG 302 - Soil Science (4)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 403 - Soil Geography and Land Use Planning (3)
- GEOG 413 - Forest Ecology and Management (3)
- GEOL 390 - Introduction to Groundwater (3)
- GEOL 421 - Environmental Geochemistry (3)
- GEOL 477 - Field Methods in Environmental Geosciences (4)
- MET 430 - Micrometeorology (3)

Select at least one of the following taxonomically-based courses (3)

- ANTH 341/BIOS 341X - Primatology (3)
- BIOS 305 - Biology of Land Plants
- BIOS 415 - Water Microbiology (3)
- BIOS 430 - Plant Systematics (4)
- BIOS 453 - Entomology (3)
- BIOS 456 - Biology of Fishes, Amphibians, and Reptiles (4)
- BIOS 457 - Biology of Birds and Mammals (4)
- BIOS 458/GEOL 458X - Vertebrate Paleontology (3)
- GEOL 468/BIOS 468X - Geomicrobiology (3)
- GEOL 470/BIOS 469X - Invertebrate Paleontology (3)
- GEOL 471/BIOS 466X - Introduction to Micropaleontology (3)

Emphasis 2. Energy Studies (34)

This emphasis combines courses in the colleges of Liberal Arts and Sciences and Engineering and Engineering Technology and will introduce students to the world of green technology and energy related issues. The focus of the emphasis includes, but is not limited to, green concepts in power production, processing, manufacturing, ecologically friendly materials, and transportation. Students will also take courses on the humanities and social sciences to better understand the role that energy plays in society. This emphasis is offered for the B.S. only.

Requirements outside Environmental Studies (13)

- ENVS 315/GEOG 315X - Geography of Energy (3)
- GEOG 453 - Environmental Management (3)
- TECH 484 - Energy Management (3)
- PHYS 210 - General Physics I (4),

OR PHYS 253 - Fundamentals of Physics I: Mechanics (4)

Select three of the following technology/engineering-based courses (9)

- ISYE 421 - Introduction to Green Engineering (3)
- ISYE 453 - Integrated Product and Process Design (3)
- TECH 245 - Pollution Prevention and Sustainable Production (3)
- TECH 411 - Greening Industrial Operations (3)
- TECH 417 - Design for Energy Efficiency and Green Materials (3)
- TECH 419 - Energy Auditing (3)
- TECH 432 - Disaster Preparedness (3)

Select three of the following applications and natural science-based courses (9)

- BIOS 106 - Environmental Biology (3)
- CHEM 427 - Environmental Chemistry (3)
- ENVS 409/BIOS 409X/GEOL409X - Water Quality (4)
- GEOG 256 - Maps and Mapping (3)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 459 - Geographic Information Systems (3)
- GEOL 421 - Environmental Geochemistry (3)
- GEOL 425 - Engineering Geology (3)
- GEOL 496 - Geophysics (3)
- MET 430 - Micrometeorology (3)
- PHYS 434 - Nuclear Energy and Radiation (3)

Select one of the following humanities and social sciences courses (3)

- ANTH 425 - Environment and Anthropology (3)
- ANTH 432 - Nature and the Environment Across Cultures (3)
- ANTH 464/CLCE 464X - Disasters without Borders (3)
- ECON 386 - Environmental Economics (3)
- GEOG 253 - Environment and Society (3)
- GEOG 455 - Land-Use Planning (3)

HIST 377 - American Environmental History (3)

PHIL 335 - Environmental Ethics (3)

SOCI 364 - Environmental Sociology (3)

Select one of the following law/policy courses (3)

POLS 220 - Introduction to Public Policy (3)

POLS 324 - Politics of Environmental, Health, and Safety Regulation (3)

Emphasis 3. Human Experience (33-34)

This emphasis is designed to give students broad exposure to how the environment is represented and researched in the social sciences and humanities. This includes a wide-ranging examination of environmental issues through time and from diverse perspectives in order to provide students the ability to better understand and critically assess contemporary environmental challenges. An underlying theme is the critical examination of the notion of sustainability as a potential principle underlying and guiding human interaction with the environment. Throughout the emphasis, issues of sustainability as they relate to rural/urban linkages will be emphasized.

Requirements outside Environmental Studies (15)

Select one of the following humanities courses (3)

ENGL 360¹ - Literature and other Disciplines (3)

ENGL 400¹ - Literary Topics1 (3)

HIST 377 - American Environmental History (3)

PHIL 335 - Environmental Ethics (3)

Select one of the following social science courses (3)

ANTH 425 - Environment and Anthropology (3)

ECON 386 - Environmental Economics (3)

SOCI 364 - Environmental Sociology (3)

Select one of the following policy courses (3)

GEOG 453 - Environmental Management (3)

PHIL 361 - Social and Political Philosophy (3)

POLS 324 - Environmental Law and Policy (3)

POLS 330 - Bureaucracy and the Public Policy Process (3)

Select two of the following communication and writing courses (6)

COMS 355 - Media Writing (3)

COMS 419 - Political Communication in America (3)

COMS 304 - Introduction to Persuasion Theory (3)

COMS 361 - Business and Professional Communication (3)

COMS 362 - Intercultural Communication (3)

ENGL 308 - Technical Writing (3)

ENGL 303 - Writing Creative Nonfiction (3)

ENGL 403 - Technical Editing (3)

JOUR 335 - Principles of Public Relations (3)

JOUR 350 - Environment, Health, and the Media (3)

JOUR 360 - Public Relations Writing (3)

JOUR 401 - Editorial and Opinion Writing (3)

JOUR 490 - Ethnic Minorities and the News Media (3)

Electives (15)

Students must select at least five of the following electives from at least four different departments in the social sciences and humanities.

Select at least two of the following social science courses (6)

ANTH 343/ENVS 343X - Extinction: Where the Wild Things Were (3)

ANTH 363 - Globalization and Corporate Cultures (3)

ANTH 404 - Peoples and Cultures of the Caribbean (3)

ANTH 425 - Environment and Anthropology (3)

ANTH 432 - Nature and the Environment Across Cultures (3)

ANTH 444 - Primate Ecology and Conservation (3)

ANTH 464/CLCE 464X - Disasters without Borders (3)

ANTH 466 - Hunters-Gatherers and the Transition to Food Production (3)

ANTH 491¹ - Current Topics in Anthropology (3)

CLCE 429 - International NGOs and Globalization (3)

ECON 386 - Environmental Economics (3)

GEOG 303 - Water Resources and the Environment (3)

GEOG 430 - Population Geography (3)

GEOG 453 - Environmental Management (3)

GEOG 455 - Land-use Planning (3)

¹ Course taught on an intermittent basis and will count toward ENVS when the topic is appropriate.

POLS 306 - The Mass Media in American Politics (3)
 POLS 322/BIOS 322X - Politics and the Life Sciences (3)
 POLS 324 - Environmental Law and Policy (3)
 POLS 330 - Bureaucracy and the Public Policy Process (3)
 POLS 480 - International Law and Organization (3)
 SOCI 364 - Environmental Sociology (3)
 SOCI 379 - Collective Behavior and Social Movements (3)
 SOCI 386 - Peace and Social Justice (3)
 SOCI 392 - Organizing for Social Action (3)

Select at least two of the following humanities courses (6)

ENGL 322 - Language in American Society (3)
 ENGL 360¹ - Literature and Other Disciplines (3)
 ENGL 400¹ - Literary Topics (3)
 HIST 359 - History of Illinois (3)
 HIST 376 - Evolution of American Capitalism (3)
 HIST 377 - American Environmental History (3)
 HIST 386 - History of Human Rights (3)
 HIST 465 - Industrial America: 1877-1901 (3)
 PHIL 331 - Ethics (3)
 PHIL 361 - Social and Political Philosophy (3)
 PHIL 430¹ - Topics in Ethics (3)
 PHIL 450¹ - Topics in Social and Political Philosophy (3)
 WOMS 430¹ - Special Topics in Women's Studies (3)
 WOMS 432 - Feminist Theory (3)

Select one of the following science, engineering, and technology courses (3-4)

BIOS 106 - Environmental Biology (3)
 BIOS 406 - Conservation Biology (4)
 ENVS 409/BIOS 409X/GEOL409X - Water Quality (4)
 GEOG 253 - Environment and Society (3)
 GEOG 303 - Water Resources and the Environment (3)
 GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
 GEOG 455 - Land Use Planning (3)
 GEOL 320 - Environments and Life through Time (4),
 OR GEOL 322 - Paleogeography, Paleoclimatology,
 Paleocology (4)
 MEE 101 - Energy and the Environment (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)

Emphasis 4. Environmental Policy (30-40)

This emphasis is designed to give students an understanding of how American law and policy have responded to environmental problems. This includes how environmental law operates and the goals of specific laws, equipping students to evaluate and better understand environmental legal issues they might encounter in their subsequent studies and professional lives

Requirements outside Environmental Studies (9)

Select one of the following policy/social science courses (3)

ANTH 425 - Environment and Anthropology (3)
 ANTH 432 - Nature and the Environment Across Cultures (3)
 ANTH 464/CLCE 464X - Disasters without Borders (3)
 CLCE 429 - International NGOs and Globalization (3)
 POLS 324 - Environmental Law and Policy (3)
 POLS 330 - Bureaucracy and the Public Policy Process (3)
 POLS 410 - Constitutional Law I (3)

Select one of the following social science courses (3)

ANTH 425 - Environment and Anthropology (3)
 ANTH 432 - Nature and the Environment Across Cultures (3)
 ANTH 464/CLCE 464X - Disasters Without Borders (3)
 ECON 386 - Environmental Economics (3)
 SOCI 364 - Environmental Sociology (3)

Select one of the following humanities courses (3)

HIST 377 - American Environmental History (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 352 - Philosophy of Science (3)

Electives (21-22)

Select at least two of the following policy courses (6-9)

ECON 386 - Environmental Economics (3)
 GEOG 453 - Environmental Management (3)
 POLS 302 - Government in Metropolitan Areas (3)
 POLS 303 - State and Local Government (3)

POLS 304 - American Public Opinion (3)
 POLS 307 - The U.S. Congress (3)
 POLS 320 - Biopolitics and Human Nature (3)
 POLS 322/BIOS 322X - Politics and the Life Sciences (3)
 POLS 324 - Environmental Law and Policy (3)
 POLS 326 - Nonprofit Management (3)
 POLS 330 - Bureaucracy and the Public Policy Process (3)
 POLS 331 - Public Administration (3)
 POLS 360 - Government and Politics in Western Europe (3)
 POLS 362 - Politics of Developing Areas (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 410 - Constitutional Law I (3)
 POLS 480 - International Law and Organization (3)

Select at least two of the following communication and writing courses (6-9)

COMS 361 - Business and Professional Communication (3)
 COMS 419 - Political Communication in America (3)
 COMS 304 - Introduction to Persuasion Theory (3)
 COMS 361 - Business and Professional Communication (3)
 COMS 362 - Intercultural Communication (3)
 ENGL 303 - Writing Creative Nonfiction (3)
 ENGL 308 - Technical Writing (3)
 ENGL 403 - Technical Editing (3)
 JOUR 335 - Principles of Public Relations (3)
 JOUR 360 - Public Relations Writing (3)
 SOCI 364 - Environmental Sociology (3)

Select at least two the following humanities courses (6-9)

HIST 323 - History of Science to Newton (3)
 HIST 324 - History of Science since 1650 (3)
 HIST 361 - History of Health and Medicine in the United States (3)
 HIST 377 - American Environmental History (3)
 PHIL 331 - Ethics (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 352 - Philosophy of Science (3)
 PHIL 361 - Social and Political Philosophy (3)
 PHIL 362 - Philosophy of Law (3)
 PHIL 430¹ - Topics in Ethics (3)
 PHIL 450¹ - Topics in Social and Political Philosophy (3)
 WOMS 432 - Feminist Theory (3)

Select one of the following science, engineering, and technology courses (3-4)

BIOS 106 - Environmental Biology (3)
 BIOS 406 - Conservation Biology (4)
 CHEM 427 - Environmental Chemistry (3)
 ENVS 409/BIOS 409X/GEOL409X/PHHE 409X - Water Quality (4)
 GEOG 253 - Environment and Society (3)
 GEOG 303 - Water Resources and the Environment (3)
 GEOG 315X/ENVS 315 - Geography of Energy (3)
 GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
 GEOG 455 - Land Use Planning (3)
 GEOL 320 - Environments and Life through Time (4),
 OR GEOL 322 - Paleogeography, Paleoclimatology,
 Paleocology (4)
 MEE 101 - Energy and the Environment (3)
 TECH 245 - Pollution Prevention and Sustainable Production (3)

Emphasis 5. Non-Government Organization (33-34)

This emphasis is linked with the new major in community leadership and civic engagement (CLCE). This emphasis is designed for students who are interested in seeking a career in public affairs in government, voluntary social agencies, and public interest groups that focus on environmental or energy issues.

Requirements outside Environmental Studies (9)

*CLCE 100 - Community Leadership and Civic Engagement (3)
 CLCE 410 - Nonprofits and Community Engagement (3)
 POLS 326/PSPA 326X - Nonprofit Management (3)

* Available for general education credit.

¹ Course taught on an intermittent basis and will count towards ENVS when the topic is appropriate

Select three of the following foundation courses (9)

- ANTH 329 - Anthropology and Contemporary World Problems (3)
- ANTH 464/CLCE 464X - Disasters without Borders (3)
- ANTH 467 - Applied Anthropology (3)
- CLCE 350 - Community Organizations in a Digital World (3)
- CLCE 429 - International NGOs and Globalization (3)
- COMS 362 - Intercultural Communication (3)
- GEOG 453 - Environmental Management (3)
- POLS 326/PSPA 326X - Nonprofit Management (3)
- PSPA 201 - Public Service Leadership (3)
- PSPA 301 - Philanthropy and Volunteerism (3)
- PSPA 402/MGMT402X - Resource Strategies for Nonprofit Organizations (3)

Select at least two of the following communication and writing courses (6)

- COMS 304 - Introduction to Persuasion Theory (3)
- COMS 361 - Business and Professional Communication (3)
- COMS 362 - Intercultural Communication (3)
- COMS 419 - Political Communication in America (3)
- ENGL 303 - Writing Creative Nonfiction (3)
- ENGL 308 - Technical Writing (3)
- ENGL 493 - Writing Creative Nonfiction II (3)

Select one of the following science, engineering, and technology courses (3-4)

- BIOS 106 - Environmental Biology (3)
- BIOS 406 - Conservation Biology (4)
- CHEM 427 - Environmental Chemistry (3)
- GEOG 253 - Environment and Society (3)
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 315X/ENVS 315 - Geography of Energy (3)
- GEOG 455 - Land Use Planning (3)
- GEOL 320 - Environments and Life through Time (4),
OR GEOL 322 - Paleogeography, Paleoclimatology,
Paleoecology (4)
- MEE 101 - Energy and the Environment (3)
- ENVS 409/BIOS 409X/GEOL409X - Water Quality (4)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- TECH 245 - Pollution Prevention and Sustainable Production (3)

Select two of the following humanities and social sciences courses (6)

- ANTH 343/ENVS 343X - Extinction: Where the Wild Things Were (3)
- ANTH 404 - Peoples and Cultures of the Caribbean (3)
- ANTH 425 - Environment and Anthropology (3)
- ANTH 432 - Nature and the Environment Across Cultures
- ECON 386 - Environmental Economics (3)
- HIST 377 - American Environmental History (3)
- PHIL 335 - Environmental Ethics (3)
- POLS 220 - Introduction to Public Policy (3)
- POLS 324 - Environmental Law and Policy (3)
- SOCI 364 - Environmental Sociology (3)

Emphasis 6. Water (37-41)

Whether it is for agriculture, industry, or personal consumption, current use of fresh water by humans is unsustainable. In many parts of the world, access to clean, safe drinking water is lacking. With the human population predicted to expand for the next 40-50 years demand for water will increase dramatically in the coming decades. It is essential that students pursuing environmental studies are well grounded in the economic, legal, physical, and biological facets of water resources. This emphasis is offered for the B.S. only.

Requirements outside Environmental Studies (13)

- GEOG 101 - Survey of Physical Geography (3) AND GEOG 102 - Survey of Physical Geography Laboratory (1),
OR GEOL 120 - Introductory Geology (3) AND GEOL 121 - Introductory Geology Laboratory (1)
- GEOG 303 - Water Resources and the Environment (3)
- GEOL 390 - Introduction to Groundwater (3)
- ENVS 409/BIOS 409X/GEOL409X - Water Quality (4)

Select three of the following conceptually-based courses (9-11)

- ANTH 343/ENVS 343X - Extinction: Where the Wild Things Were (3)
- CHEM 427 - Environmental Chemistry (3)
- GEOG 492/GEOL 492X - Hydrology (3)
- BIOS 406 - Conservation Biology (4)
- BIOS 415 - Water Microbiology (3)
- BIOS 448 - Aquatic Ecology (4)
- GEOL 421 - Environmental Geochemistry (3)
- GEOL 442/GEOG 442X - Geomorphology (3)
- GEOL 468/BIOS 468X - Geomicrobiology (3)
- GEOL 490 - Hydrogeology (3)
- GEOL 493 - Groundwater Geophysics (3)
- GEOL 496 - Geophysics (3)

Select three of the following methods-based courses (9-11)

- GEOG 302 - Soil Science (4)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 403 - Soil Geography and Land Use Planning (3)
- GEOG 453 - Environmental Management (3)
- GEOG 455 - Land-Use Planning (3)
- GEOL 320 - Environments and Life through Time (4) OR
- GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (4)
- GEOL 425 - Engineering Geology (3)
- GEOL 477 - Field Methods in Environmental Geosciences (4)
- GEOL 491 - Geophysical Well Logging (3)
- GEOL 491 - Geophysical Well Logging (3)
- MET 430 - Micrometeorology (3)
- PHHE 351 - Elements of Environmental Health (3)

Select one of the following engineering/technology-based courses (3)

- GEOG 315X/ENVS 315 - Geography of Energy (3)
- ISYE 421 - Introduction to Green Engineering (3)
- MEE 101 - Energy and the Environment (3)
- TECH 245 - Pollution Prevention and Sustainable Production (3)

Select one of the following humanities and social sciences courses (3)

- ANTH 425 - Environment and Anthropology (3)
- ANTH 432 - Nature and the Environment Across Cultures (3)
- CLCE 429 - International NGOs and Globalization (3)
- ECON 386 - Environmental Economics (3)
- HIST 377 - American Environmental History (3)
- PHIL 335 - Environmental Ethics (3)
- POLS 220 - Introduction to Public Policy (3)
- POLS 324 - Environmental Law and Policy (3)
- SOCI 364 - Environmental Sociology (3)

Total Hours for a Major in Environmental Studies: 58-81 (B.A.); OR 63-75 (B.S.)

Minor in Environmental Studies (21-22)

Requirements (21-22)

- ENVS 301 - Environmental Science I: Physical Systems (3)
- ENVS 302 - Environmental Science II: Biological Systems (3)
- ENVS 303 - Environment in the Social Sciences and Humanities (3)
- ENVS 304 - Environmental Law, Policy and Economics (3)
- TECH 305/ENVS 305X - Green Technologies (3)
- Select from one of the following natural science, engineering, and technology courses (3-4)
 - BIOS 406 - Conservation Biology (4)
 - CHEM 427 - Environmental Chemistry (3)
 - ENVS 315/GEOG 315X - Geography of Energy (3)
 - GEOG 303 - Water Resources and the Environment (3)
 - GEOG 455 - Land Use Planning (3)
 - GEOL 320 - Environments Life Through Time (4),
OR GEOL 322 - Paleogeography, Paleoclimatology, and
Paleoecology (4)
 - MEE 101 - Energy and the Environment (3)
 - TECH 245 - Pollution Prevention and Sustainable Production (3)
- Select one of the following humanities and social sciences courses (3)
 - ANTH 425 - Environment and Anthropology (3)
 - ECON 386 - Environmental Economics (3)
 - HIST 377- American Environmental History (3)

PHIL 335- Environmental Ethics (3)
 POLS 220/PSPA 220X - Introduction to Public Policy (3)
 POLS 324 - Politics or Environmental Health and Safety
 Regulation (3)
 SOCI 364 - Environmental Sociology (3))

Course List (ENVS)

301. ENVIRONMENTAL SCIENCES I: PHYSICAL SYSTEMS (3). Physical scientific foundations to facilitate understanding of current environmental issues. Spatially, material includes local, regional, and global scale processes. Temporally, provides context for current environmental changes by supplying an understanding of the Earth's environment in geologic time. Topics covered are primarily those that relate to environmental processes that have been most subject to human manipulation over the past millennia. Includes at least two Saturday field trips.

302. ENVIRONMENTAL SCIENCE II: BIOLOGICAL SYSTEMS (3). Introduction to the biological component of environmental science, focusing on understanding the functioning of ecosystems, the patterns of biological diversity, the processes that influence those patterns over space and time, and how human activities can disrupt those processes. At least two Saturday field trips are required. PRQ: ENVS 301.

303. ENVIRONMENT IN THE SOCIAL SCIENCES AND HUMANITIES (3). Focus on human interaction with, and representation of, the environment with particular attention to how human communities and political institutions respond to and serve as agents of environmental change. Divided into three basic components intended to provide an understanding of trends in prehistoric and historic human adaptation, contemporary environmental challenges linked to industrialization, and the ways in which contemporary human communities and political institutions respond to and contest environmental challenges within the context of complex state and global changes.

304. ENVIRONMENTAL LAW, POLICY, AND ECONOMICS (3). Overview of how American society has responded to environmental problems through law and policy. Examination of the public policy debates that have animated the environmental movement in general, and environmental law in particular, including risk assessment and risk management. Includes an overview of environmental law, including the regulatory process, judicial review, and a brief examination of basic environmental statutes. Introduction to an economic analysis of environmental problems and proposed market-based solutions.

305X. GREEN TECHNOLOGIES (3). *Crosslisted as TECH 305*. Introduction to environmentally friendly engineering and technological and new technologies that utilize green principles and green transportation. Includes topics in new areas of green manufacturing and materials used today and planned for the future, including the operation and manufacture of solar cells and the production of wind, thermal, and hydroelectric power. Topics will vary depending upon new trends in industry. Several on-site visits to green industries in the region. PRQ: MATH 155 with a C or better or MATH 211 or MATH 229 or MATH 230; and CHEM 100 or CHEM 110 or CHEM 210 or PHYS 140.

315. GEOGRAPHY OF ENERGY (3). *Crosslisted with GEOG 315X*. Interdisciplinary overview of the geography of energy. Basics of energy literacy, including unit conversions and net energy analysis. Geographic components of current energy production, consumption and transportation, including fossil fuels and renewable energy resources. Major geographic, energetic, environmental and/or economic issues related to the continued production of energy. Comparison and contrast of energy options from a net energy perspective.

343X. EXTINCTION: WHERE THE WILD THINGS WERE (3). *Crosslisted as ANTH 343*. Examination of the processes of natural selection, genetic drift, the formation of new species, and extinction. Review of natural extinction events due to environmental change as well as human-induced extinctions of prehistoric, historic and modern species.

409. WATER QUALITY (4). *Crosslisted as BIOS 409X and GEOL 409X, and PHHE 409X*. Survey of microbiological and chemical parameters affecting water quality and their associated public health aspects. Topics include microbial detection methods, waterborne disease, organic and inorganic parameters, drinking water, wastewater treatment plants, source water, and risk assessment. Lectures, laboratories, and a field trip. PRQ: CHEM 110 and CHEM 111; or consent of the department.

421X. INTRODUCTION TO GREEN ENGINEERING (3). *Crosslisted as ISYE 421*. Basic principles of green engineering, impact of engineering activities on the global environment and ways to minimize the impact through better selection of materials, design of products and processes, distribution and reuse of products, and management of life cycles, etc. Life cycle analysis concepts and their applications to product and process life cycles. Environmental ethics and environmental auditing, including ISO environmental standards. PRQ: Consent of the department.

427X. ENVIRONMENTAL CHEMISTRY (3). *Crosslisted as CHEM 427*. Exploration of atmospheric chemistry, air pollution, and water pollution, with particular emphasis on the impact of organic compounds in the environment. Three hours of lecture/week. PRQ: GEOG 101 or GEOL 105 or ENVS 301, and CHEM 211 and 213, or consent of the department.

450. ISSUES IN ENVIRONMENTAL STUDIES (3). Interdisciplinary approaches and perspectives on selected issues in environmental studies. Independent study and seminars. PRQ: Completion of 15 semester hours comprising the ENVS core (ENVS 301, ENVS 302, ENVS 303, ENVS 304, and ENVS 305X).

490. UNDERGRADUATE RESEARCH (1-3). Independent work in environmental studies under the direction of a faculty member. May be repeated to a maximum of 6 semester hours. PRQ: Consent of department

491. SPECIAL TOPICS IN ENVIRONMENTAL STUDIES (1-3). Lectures, discussion, readings, and reports on topics of special interest in a particular field of environmental studies. May be repeated for a maximum of 6 semester hours. PRQ: Consent of the department.

492. INTERNSHIP IN ENVIRONMENTAL STUDIES (1-6). Students work for a semester or a summer as interns with appropriate organizations under the supervision and advisement of a faculty adviser. May be repeated to a maximum of 6 semester hours.

498. SENIOR THESIS (1-3). Independent research on an environmental studies 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. PRQ: Consent of the department.

499. SENIOR THESIS: HONORS (1-3). Independent research for honors students on an environmental studies 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. PRQ: Consent of the department.

Environmental Studies Faculty

Buyung Agusdinata, Ph.D., Delft University of Technology, assistant professor in Industrial and Systems Engineering
 Holly Jones, Ph.D., Yale University, assistant professor in Biological Sciences
 Melissa Lenczewski, Ph.D., University of Tennessee, associate professor in Geology and Environmental Geosciences
 Kevin Martin, Ph.D., Missouri University of Science and Technology, assistant professor in Technology
 Emily McKee, Ph.D., University of Michigan, assistant professor in Anthropology
 David Murphy, Ph.D., State University of New York, assistant professor in Geography

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, German, and Spanish. There are two emphases available for each major. Foreign language majors may gain licensure to teach at the secondary level in French, German, and Spanish.

The department offers minors in Chinese, French, German, Italian, Japanese, Russian, and Spanish, participates in the interdisciplinary minors in 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 for general education credit.

Department Requirements

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 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, and Spain.

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Language and Literature

Requirements in Department (37)

- FLFR 301 - Advanced French Grammar and Composition (3)
- FLFR 302 - Advanced French Grammar and Translation (3)
- FLFR 311 - French Conversation (3)
- FLFR 320 - *Analyse de Texte* (3)
- FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
- Choose 3 courses from the following (9)
 - 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)
 - FLFR 411 - Advanced Composition in French (3)
 - FLFR 415 - Advanced French Conversation (3)
 - FLFR 481 - French Phonetics and Phonemics (3)
- Course work from 400-level French courses including FLAL 483 (15)

Total Hours for Emphasis 1, Language and Literature: 37

Emphasis 2. Translation and Business French

Requirements in Department (34)

- FLFR 301 - Advanced French Grammar and Composition (3)
- FLFR 302 - Advanced French Grammar and Translation (3)
- FLFR 311 - French Conversation (3)
- FLFR 320 - *Analyse de Texte* (3)
- FLFR 412 - Commercial French (3)
- FLFR 483 - *Theme et Version* (3),
OR FLFR 484 - Advanced Translation (3)
- FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
- Choose five courses from the following (15)
 - 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)
 - FLAL 415 - Internship in Foreign Languages (3)
 - FLAL 420 - Introduction to Translation Theory (3)
 - FLAL 483 - Applied Linguistics and the Romance Languages (3)
 - Elective from 400-level French courses (3)

Requirements outside Department (15)

- Choose five of the following (15)
 - ANTH 363 - Globalization and Corporate Cultures (3)
 - ANTH 427 - Economic Anthropology (3)
 - COMS 361 - Business and Professional Communication (3)
 - COMS 362 - Intercultural Communication (3)
 - CLCE 429 - International NGOs and Globalization (3)
 - MGMT 333 - Principles of Management (3)
 - MGMT 346 - Business Communication (3)
 - MKTG 310 - Principles of Marketing (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 - Multichannel Direct Marketing (3)

¹ May be waived on the basis of high school preparation or placement examination.

MKTG 365 - Principles of Retailing (3)
 MKTG 367 - Principles of Global Marketing (3)
 MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business French: 49

Major in German (B.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Language and Literature

Requirements in Department (34)

FLGE 301 - Advanced German Grammar (3)
 FLGE 311 - Advanced German Conversation (3)
 Choose three of the following (9)
 FLGE 302 - Advanced German Composition and Translation (3)
 FLGE 320 - German Texts and Media (3)
 FLGE 321 - Masterpieces of German Literature I (3)
 FLGE 322 - Masterpieces of German Literature II (3)
 FLGE 323 - Special Topics in German Language, Literature, or Culture (3)

A minimum of 6 semester hours must be from literature courses.

Total Hours for Emphasis 1, Language and Literature: 34

Emphasis 2. Translation and Business German

Requirements in Department (34)

FLGE 301 - Advanced German Grammar (3)
 FLGE 311 - Advanced German Conversation (3)
 FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)
 Choose three of the following (9)
 FLGE 302 - Advanced German Composition and Translation (3)
 FLGE 320 - German Texts and Media (3)
 FLGE 321 - Masterpieces of German Literature I (3)
 FLGE 322 - Masterpieces of German Literature II (3)
 FLGE 323 - Special Topics in German Language, Literature, or Culture (3)
 Choose two of the following (6)
 FLGE 412 - Practical Business German (3),
 OR FLGE 414 - German Business Communication (3)
 FLGE 482 - Approaches to Translation (3),
 OR FLGE 484 - Translation Practice (3)
 Course work from 400-level German courses (12)

Requirements outside Department (15)

Choose five courses from the following:
 ANTH 363 - Globalization and Corporate Cultures (3)
 ANTH 427 - Economic Anthropology (3)
 COMS 361 - Business and Professional Communication (3)
 COMS 362 - Intercultural Communication (3)
 CLCE 429 - International NGOs & Globalization (3)
 MGMT 333 - Principles of Management (3)
 MGMT 346 - Business Communication (3)
 MKTG 310 - Principles of Marketing (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 367 - Principles of Global Marketing (3)
 MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business German: 49

Major in Spanish (B.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Language and Literature

Requirements in Department (37)

FLSP 211¹ - Intermediate Spanish Conversation (3),
 OR FLSP 215 - Spanish Grammar for Spanish Speakers (3)
 FLSP 301 - Advanced Spanish Grammar (3)
 FLSP 302 - Advanced Composition in Spanish (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 361 - Introduction to Spanish Cultures (3),
 OR FLSP 362 - Introduction to Spanish American Cultures (3)
 FLSP 480 - Introduction to Hispanic Linguistics (3)
 FLAL 400 - Design and Creation of Electronic Portfolios for Foreign Language Majors (1)

Choose three of the following (9)
 FLSP 431 - Spanish Golden Age Poetry (3)
 FLSP 432 - Medieval Spanish Literature (3)
 FLSP 433 - Classical Spanish Drama (3)
 FLSP 434 - Cervantes: The Quixote (3)
 FLSP 435 - Spanish Golden Age Prose (3)
 FLSP 436 - Spanish Romanticism and Realism (3)
 FLSP 437 - The Generation of 1898 (3)
 FLSP 438 - Contemporary Spanish Literature (3)
 FLSP 439 - Women Authors in Hispanic Literature (3)
 FLSP 440 - Spanish American Poetry and Theater (3)
 FLSP 441 - Spanish American Novel (3)
 FLSP 445 - Latin American Women Writers (3)
 FLSP 452 - Literature of the Caribbean (3)
 FLSP 454 - Mexican Literature (3)
 FLSP 455 - Spanish-American Short Story (3)
 FLSP 456 - Colonial Latin American Literature (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 463 - Hispanic Culture Through Film (3)
 FLSP 481 - Spanish Phonology (3)
 FLSP 482 - Foundations in Spanish Sociolinguistics (3)
 FLSP 485 - Spanish Syntax (3)
 FLSP 486 - Contrastive Grammatical Structures in Spanish and English (3)
 FLSP 487 - Hispanic Dialectology (3)
 FLSP 491 - History of the Spanish Language (3)
 FLAL 483 - Applied Linguistics and the Romance Languages (3)

Total Hours for Emphasis 1, Language and Literature: 37

Emphasis 2. Translation and Business Spanish

Requirements in Department (37)

FLSP 211¹ - Intermediate Spanish Conversation (3),
 OR FLSP 215 - Spanish Grammar for Spanish Speakers (3)
 FLSP 301 - Advanced Spanish Grammar (3)
 FLSP 302 - Advanced Composition in Spanish (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 361 - Introduction to Spanish Cultures (3),
 OR FLSP 362 - Introduction to Spanish-American Cultures (3)
 FLSP 414 - Spanish Business Communications (3)
 FLSP 480 - Introduction to Hispanic Linguistics (3)
 FLSP 483 - Techniques of Translation (3),
 OR 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)

Choose two of the following (6)

- FLSP 380 - Gender and Hispanic Business Practices (3)
- FLSP 412 - Applied Spanish Conversation (3)
- FLSP 489 - Consecutive Interpretation: Theory & Practice (3)
- FLAL 415 - Internship in Foreign Languages (3)
- FLAL 420 - Introduction to Translation Theory (3)
- One elective from Emphasis 1 (FLSP 486 is recommended)

Requirements outside Department (15)

Choose five of the following (15)

- ANTH 363 - Globalization and Corporate Cultures (3)
- ANTH 427 - Economic Anthropology (3)
- COMS 361 - Business and Professional Communication (3)
- COMS 362 - Intercultural Communication (3)
- CLCE 429 - International NGOs and Globalization (3)
- MGMT 333 - Principles of Management (3)
- MGMT 346 - Business Communication (3)
- MKTG 310 - Principles of Marketing (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 367 - Principles of Global Marketing (3)
- MKTG 370 - Internet Marketing (3)

Total Hours for Emphasis 2, Translation and Business Spanish: 52

Education Licensure

Students majoring in French, German, or Spanish who seek licensure to teach a language in grades K-12 should consult with the Foreign Language Teacher Licensure office at the earliest possible in addition to university general education requirements. opportunity. Teacher licensure involves significant requirements in addition to the completion of a language degree and university general education requirements.

Procedures

Declare a major in French, German, or Spanish; usually with an emphasis in language and literature.

Consult with the Foreign Language Teacher Licensure office at the time the major is declared and at the beginning of each semester thereafter.

Consult each semester with the adviser for courses in the specific language major. Apply for the first clinical course, ILAS 201.

Students are admitted to the educator licensure program when they have:

- completed the written application for admission to the program, and a satisfactory interview,
- passed the Illinois Test of Academic Performance (TAP, formerly, Basic Skills Test) or the ACT score substitution (22 composite or higher with writing component),
- attained a cumulative GPA of 2.75 at the time of application, and a GPA of 3.00 in the language in which the applicant hopes to be certified,
- successfully completed ILAS 201, and
- earned a grade of at least B in the FLFR 301, or FLGE 301, or FLSP 301 Advanced Grammar course.

Retention

Students admitted to the program must maintain the GPA requirements of 2.75 overall and 3.00 in the foreign language major, and display appropriate professional dispositions at all times.

Requirements in Department²

Educator licensure students are required to take all the regular courses for a French, German, or Spanish major, in addition to choosing specific culture and linguistics courses as upper-level electives. Educator licensure students consult regularly with both the language advisor adviser and the Foreign Language Educator Licensure office when choosing courses.

For all majors: FLMT 401, FLMT 490, FLMT 491, and FLPT 485 (student teaching).

Requirements outside Department

Prerequisites:

ENGL 207 - Fundamentals of English Grammar (3) or test out;

*PSYC 102 - Introduction to Psychology (3);

For students who do not have an ACT+ writing score of 22 or above for substitution and who have not passed the TAP/Basic Skills Test, a course in Test of Academic Proficiency preparation may be required. Consult the Foreign Language Educator Licensure office.

One course from another department with cultural content in the target culture (consult with the Foreign Language Educator Licensure office about which courses are available for each language).

Education course work in foundations of education, human development and learning, assessment, teaching exceptional students, and teaching English Language Learners. Consult with the Foreign Language Educator Licensure office about which courses are approved for satisfying this requirement.

Clinical courses: ILAS 201 - Introductory Clinical Experience (1) and ILAS 301 - Second Clinical Experience (1-2)

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 499, 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 Chinese Studies (24)

Required (18)

- 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 311 - Advanced Chinese Conversation (3)
- FLCH 361 - Introduction to Chinese Culture (3)

* Available for general education credit.

² These courses are in addition to those required of non-educator licensure majors with an emphasis in language and literature.

Electives (6)

Two of the following from departments other than the student's major (6):

- ECON 341A - Economic Area Studies: Asia (3)
- FLCH 320 - Advanced Chinese Reading (3)
- FLCH 381 - Introduction to Chinese Language and Business Practices (3)
- HIST 344 - History of Ancient China (3)
- HIST 345 - History of China Since The Tang Dynasty (3)
- HIST 346 - Women in Asian History (3)
- HIST 445 - The Chinese Revolution (3)
- HIST 470 - America and Asia (3)
- HIST 490J - Special Topics in History: Asian (3)
- MUHL 432 - Music of China (3)
- POLS 372 - Politics of China, Japan, and Korea (3)

Nine or more semester hours in the minor must be taken at NIU.

Minor in French (18)

Check departmental information for any additional requirements.

Choose 5 courses from among the following (15)

- FLFR 301 - Advanced French Grammar and Composition (3)
- FLFR 302 - Advanced French Grammar and Translation (3)
- FLFR 311 - French Conversation (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)

Elective from 400-level FLFR courses (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in German (18)

Six or more semester hours in the minor must be taken at NIU.

Check departmental information for any additional requirements.

Requirements (18)

Choose six courses from among the following (18)

- FLGE 301 - Advanced German Grammar (3)
- FLGE 302 - Advanced German Composition and Translation (3)
- FLGE 311 - Advanced German Conversation (3)
- FLGE 320 - German Texts and Media (3)
- FLGE 321 - Masterpieces in German Literature I (3)
- FLGE 322 - Masterpieces in German Literature II (3)
- FLGE 323 - Special Topics in German Language, Literature or Culture (3)

Elective from 400-level FLGE course (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Italian (24)

- FLIT 101 and FLIT 102¹ - Elementary Italian I and II (6)
- FLIT 201 and FLIT 202¹ - 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: ENGL 318 OR ENGL 483 (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Japanese Studies (24)

Required courses (18):

- 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 311 - Advanced Japanese Conversation (3)

FLJA 361 - Introduction to Japanese Culture (3)

Electives (6):

Two of the following from departments other than the student's major (6)

- ECON 341A - Economic Area Studies: Asia (3)
- FLJA 301 - Advanced Japanese Grammar and Composition I (3)
- FLJA 302 - Advanced Japanese Grammar and Composition II (3)
- FLJA 321 - Introduction to Japanese Literature (3)
- FLJA 381 - Introduction to Japanese Language and Business Practices (3)
- FLJA 411 - Modern Japanese (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 444 - Japanese Empire (3)
- HIST 470 - America and Asia (3)
- HIST 490J - Special Topics in History: Asian (3)
- POLS 372 - Politics of China, Japan, and Korea (3)

Nine or more semester hours in the minor must be taken at NIU.

Minor in Russian (24)

- FLRU 101 - Elementary Russian I (3)
- FLRU 102 - Elementary Russian II (3)
- FLRU 201 - Intermediate Russian I (3)
- FLRU 202 - Intermediate Russian II (3)
- FLRU 311 - Russian Conversation and Composition (3)

Three elective to be chosen from the following; one must be from FLRU (9):

- FLRU 301 - Advanced Russian Grammar and Composition (3)
- FLRU 321 - Introduction to Russian Literature (3)
- FLRU 412 - Business Russian (3)
- FLRU 431 - 19th Century Russian Literature (3)
- FLRU 432 - Russian Literature and Culture (3)
- FLRU 433 - Russian Modernist Literature: 1881-1930 (3)
- FLRU 434 - 20th Century Russian Literature (3)
- FLRU 461 - Contemporary Russian Culture (3)
- FLRU 480 - Modern Russian (3)
- HIST 336 - Medieval Russia: Origins to 1682 (3)
- HIST 337 - History of Russia: 1682-1917 (3)
- HIST 338 - History of Russia: 1917- Present (3)
- HIST 434 - The Russian Revolution (3)
- HIST 435 - Stalin and Stalinism (3)

Six or more semester hours in the minor must be taken at NIU.

Minor in Spanish (21)

Check departmental information for any additional requirements.

- FLSP 211¹ - 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)

Choose four of the following (12)

- FLSP 302 - Advanced Composition in Spanish (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 361 - Introduction to Spanish Cultures (3)
- FLSP 362 - Introduction to Spanish American Cultures (3)
- Elective from 400-level FLSP courses (3)

Six or more semester hours in the minor must be taken at NIU.

* Available for general education credit.

¹ May be waived on the basis of high school preparation or placement examination.

Course List

French (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.

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.

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.

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.

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.

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.

311. FRENCH CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLFR 202.

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.

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.

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.

323. SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE, OR CULTURE (3). Topics announced. PRQ: FLFR 320 or consent of department.

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.

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.

382. READING EXPOSITORY FRENCH II (3). Continuation of FLFR 381. Open only to graduate students with credit for FLFR 381. S/U grading.

411. ADVANCED COMPOSITION IN FRENCH (3). PRQ: FLFR 301 or FLFR 302, or consent of department.

412. COMMERCIAL FRENCH (3). Practice in business and administrative correspondence in French. PRQ: FLFR 301 or FLFR 302; or consent of department.

415. ADVANCED FRENCH CONVERSATION (3). Continuation of FLFR 311 that focuses on a broader range of conversation topics related to many areas of French popular culture, current events, and short readings. PRQ: FLFR 311 or consent of department.

431. 17TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 320 or consent of department.

433. 18TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 320 or consent of department.

435. 19TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 320 or consent of department.

437. AUTHOR IN CONTEXT (3). Interdisciplinary study of literary works within their historical and cultural contexts. Close readings of texts combined with a cross-section approach to their cultural landscape to map out the interplay between literature and other cultural agents (visual arts, music, architecture, science, philosophy, politics, etc.). PRQ: FLFR 320 or consent of department.

438. 20TH CENTURY FRENCH LITERATURE (3). PRQ: FLFR 320 or consent of department.

440. STUDIES IN FRANCOPHONE LITERATURE (3). General treatment of the works of Francophone writers from one of the following regions: French Caribbean, the Maghreb, or French-speaking Americas. PRQ: FLFR 320 or consent of department.

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 320 or consent of department.

443. FRENCH LITERATURE OF THE RENAISSANCE (3). PRQ: FLFR 320 or consent of department.

445. FRENCH WOMEN WRITERS (3). Works of selected French women writers from the Middle Ages to the present. Course taught in English with readings in English or French according to the student's background. PRQ: FLFR 320 or consent of department.

446. STUDIES IN FRENCH GENRES (3). Focus on major genres in French literature and an overview of important literary texts belonging to that genre across the centuries. Content will vary each term but may include genres such as theatre, poetry, romance, epistolary texts, and short narratives. PRQ: FLFR 320 or consent of department.

463. *LA FRANCE CONTEMPORAINE* (3). Political, social, and cultural development of France since 1945. PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

464. PARIS: CITY OF LIGHTS (3). Study of urban changes in Paris from the Middle Ages to the present. PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

465. *VERSAILLES ET LOUIS XIV* (3). Examination of the relationship between different cultural forms (e.g. architecture, art, spectacle, and literature) associated with Versailles and power at the court of Louis XIV. PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

480. FRENCH PUBLISHING ATELIER (3). Writing course focused on creating and publishing a collaborative web magazine in French. While all activities revolve around writing and speaking in French, student contributions involve a variety of forms: written text, video (including translation and overdubbing), sound files, visual art, etc., in any web-supported format. Students manage, edit, and select materials for publication. PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

481. FRENCH PHONETICS AND PHONEMICS (3). PRQ: FLFR 301 or FLFR 302 or FLFR 311; or consent of department.

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 301 or FLFR 302 or FLFR 311; or consent of department.

483. *THEME ET VERSION* (3). Translation of selected literary passages, alternating between French and English. PRQ: FLFR 302 or consent of department.

484. ADVANCED TRANSLATION (3). Intensive training in accurate translation of business, administrative, and technical texts. PRQ: FLFR 302 or consent of department.

Italian (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.

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.

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.

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.

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.

301. ADVANCED ITALIAN GRAMMAR AND COMPOSITION (3). PRQ: FLIT 202 or equivalent.

311. ADVANCED ITALIAN CONVERSATION (3). Practical training in conversational skills to achieve fluency of expression. PRQ: FLIT 202 or equivalent.

321. MASTERPIECES OF ITALIAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLIT 202 or equivalent.

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.

382. READING EXPOSITORY ITALIAN II (3). Continuation of FLIT 381. Open only to graduate students with credit for FLIT 381. S/U grading.

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.

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.

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.

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.

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.

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.

202. INTERMEDIATE SPANISH II (3). Further development of the skills of reading, writing, listening comprehension and speaking. Grammatical problems; reading of literary and nonliterary 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.

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.

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 and consent of department.

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.

301. ADVANCED SPANISH GRAMMAR (3). PRQ: FLSP 202 or FLSP 215, or equivalent.

302. ADVANCED COMPOSITION IN SPANISH (3). PRQ: FLSP 301.

311. ADVANCED SPANISH CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLSP 202 and FLSP 211, or FLSP 215.

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.

321. MASTERPIECES OF SPANISH LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

322. MASTERPIECES OF SPANISH-AMERICAN LITERATURE (3). Introduction to literary analysis of masterpieces representing the principal periods and genres. PRQ: FLSP 320.

361. INTRODUCTION TO SPANISH CULTURES (3). Overview of Spanish culture from the medieval period to the present, with emphasis on art, music, cinema, and the diverse customs that constitute Spanish culture. PRQ: FLSP 202 or FLSP 215.

362. INTRODUCTION TO SPANISH AMERICAN CULTURES (3). Overview of Spanish American culture from the pre-Hispanic period to the present, with emphasis on art, music, cinema, and the diverse customs that constitute Latin American culture. PRQ: FLSP 202 or FLSP 215.

380. GENDER AND HISPANIC BUSINESS PRACTICES (3). Study of the cultural impact on business practices in Hispanic worlds, focused through the evolution of gender roles. Taught in English. Readings and assignments are either in Spanish or English depending upon student's field. PRQ: FLSP 302.

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.

382. READING EXPOSITORY SPANISH II (3). Continuation of FLSP 381. Open only to graduate students with credit for FLSP 381. S/U grading.

412. APPLIED SPANISH CONVERSATION (3). Development of conversational skills applied to occupational situations dealing with native Spanish speakers. PRQ: FLSP 311.

414. SPANISH BUSINESS COMMUNICATIONS (3). Practice in contemporary business and administrative communications and correspondence in Spanish. PRQ: FLSP 302.

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.

432. MEDIEVAL SPANISH LITERATURE (3). Through the 15th century. PRQ: FLSP 321.

433. CLASSICAL SPANISH DRAMA (3). PRQ: FLSP 321.

434. CERVANTES: THE QUIXOTE (3). PRQ: FLSP 321.

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.

436. SPANISH ROMANTICISM AND REALISM (3). PRQ: FLSP 321.

437. THE GENERATION OF 1898/*FIN DE SIGLO* (3). PRQ: FLSP 321.

438. CONTEMPORARY SPANISH LITERATURE (3). PRQ: FLSP 321.

439. WOMEN AUTHORS IN HISPANIC LITERATURE (3). Study of literary works written by women in Spanish-speaking worlds. Taught in English. Readings in Spanish or English according to student's field. PRQ: Consent of department.

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.

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.

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.

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.

454. MEXICAN LITERATURE (3). General treatment of Mexican literature, with emphasis on the 20th century. PRQ: FLSP 322.

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.

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.

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.

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.

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.

460. CONTEMPORARY SPANISH AMERICAN LITERATURE (3). Spanish American prose, poetry, and theater from 1945 to the present. PRQ: FLSP 322 or consent of department.

461. SPECIAL TOPICS IN SPANISH CIVILIZATION (3). Topics in Spanish culture and civilization. PRQ: FLSP 361 or FLSP 362.

462. SPECIAL TOPICS IN SPANISH-AMERICAN CIVILIZATION (3). Topics in Spanish-American culture and civilization. PRQ: FLSP 361 or FLSP 362.

463. HISPANIC CULTURE THROUGH FILM (3). Introduction to contemporary Hispanic culture through the study of film. Taught in Spanish. PRQ: FLSP 361 or FLSP 362 or consent of department.

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.

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.

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.

483. TECHNIQUES OF TRANSLATION (3). Development of skill and techniques of translation from Spanish to English and English to Spanish. PRQ: FLSP 302.

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 302.

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 302.

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.

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 480.

489. CONSECUTIVE INTERPRETATION: THEORY AND PRACTICE (3). Provides practical instruction in consecutive interpretation from English to Spanish and Spanish to English. Focus is on consecutive interpretation techniques such as enhancing listening performance and note-taking skills. PRQ: FLSP 302 or consent of department.

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 480.

Portuguese (FLPO)

103. BEGINNING PORTUGUESE I (5). Development of skills in comprehension, speaking, reading, and writing, with emphasis on the aural/oral skills. Supplementary work in the language laboratory.

104. BEGINNING PORTUGUESE II (5). Continuation of FLPO 103. PRQ: FLPO 103.

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.

202. INTERMEDIATE PORTUGUESE II (3). Continuation of FLPO 201. PRQ: FLPO 201 or consent of department.

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)

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.

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.

103. BEGINNING GERMAN CONVERSATION (1-2). German conversation at the elementary level. PRQ: FLGE 101. CRQ: FLGE 102.

201. INTERMEDIATE GERMAN I (3). Review of grammar, structure, and syntax. Reading and discussion of a variety of text types, 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.

202. INTERMEDIATE GERMAN II (3). Continuation of FLGE 201. PRQ: FLGE 201.

203. INTERMEDIATE GERMAN CONVERSATION (1-2). Continuation of FLGE 103. PRQ: FLGE 102, FLGE 103, and FLGE 201. CRQ: FLGE 202 or consent of department.

301. ADVANCED GERMAN GRAMMAR (3). Theory and practice of grammatical structure and stylistics. Emphasis on points of conflict between English and German. PRQ: FLGE 202 or consent of department.

302. ADVANCED GERMAN COMPOSITION AND TRANSLATION (3). Emphasis on style in the written language in compositions and basic techniques of translation from German to English and English to German. PRQ: FLGE 202.

311. ADVANCED GERMAN CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLGE 202 or consent of department.

320. GERMAN TEXTS AND MEDIA (3). Emphasis on exposure to a variety of text genres and media, while increasing vocabulary acquisition and developing skills in reading, summarizing, and analyzing. PRQ: FLGE 202.

321. MASTERPIECES IN GERMAN LITERATURE I (3). Study of authors and literary genres from the Middle Ages to the 18th century. PRQ: FLGE 202 or consent of department.

322. MASTERPIECES IN GERMAN LITERATURE II (3). Study of authors and literary genres from the 19th century to today. PRQ: FLGE 202 or consent of department.

323. SPECIAL TOPICS IN GERMAN LANGUAGE, LITERATURE, OR CULTURE (3). Special topics in German. Topics announced. PRQ: FLGE 202 or consent of department.

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.

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.

382. READING EXPOSITORY GERMAN II (3). Continuation of FLGE 381. Open only to graduate students with credit for FLGE 381. S/U grading.

411. MODERN GERMAN (3). Current usages in spoken and written German with emphasis on contemporary vocabulary, idiomatic expressions, and syntax. PRQ: Two 300-level German courses or consent of department.

412. PRACTICAL BUSINESS GERMAN (3). German language study oriented toward business practices. Techniques of spoken and written communication necessary in the German work environment. PRQ: Two 300-level German courses or consent of department.

414. GERMAN BUSINESS COMMUNICATION (3). Advanced practice in business communication, with analysis of authentic contemporary materials. Extensive practice in the writing of business correspondence and formal presentations. PRQ: Two 300-level German courses or consent of department.

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: Two 300-level German courses or consent of department.

433. GERMAN ROMANTICISM (3). Background, theory, and major literary texts of German Romanticism. PRQ: Two 300-level German courses or consent of department.

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: Two 300-level German courses or consent of department.

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: Two 300-level German courses or consent of department.

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: Two 300-level German courses or consent of department.

461. GERMAN CULTURE AND CIVILIZATION 800-1832 (3). Social and cultural developments in the German-speaking lands from 800 to 1832. PRQ: Two 300-level German courses or consent of department.

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. PRQ: Two 300-level German courses or consent of department.

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. PRQ: Two 300-level German courses or consent of department.

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: Two 300-level German courses or consent of department.

482. APPROACHES TO TRANSLATION (3). Theoretical approaches to translation, history of translation, as well as the development of skills and techniques of translation. PRQ: FLGE 302 or consent of department.

484. TRANSLATION PRACTICE (3). Intensive training in accurate and idiomatic translation from German to English and English to German with emphasis on a variety of different text types. PRQ: FLGE 302 or consent of department.

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: Two 300-level German courses or consent of department.

Classic Languages (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.

102. ELEMENTARY LATIN II (3). Continuation of FLCL 101. PRQ: FLCL 101 or consent of department.

103. BEGINNING ANCIENT GREEK I (3). Introduction to ancient Greek, comprising fundamentals of alphabet, grammar, structure, syntax, and simple readings.

104. BEGINNING ANCIENT GREEK II (3). Continuation of FLCL 103. PRQ: FLCL 103 or consent of department.

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.

202. INTERMEDIATE LATIN II (3). Continuation of FLCL 201. PRQ: FLCL 201.

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.

204. INTERMEDIATE ANCIENT GREEK II (3). Continuation of FLCL 203. PRQ: FLCL 203.

271. CLASSICAL MYTHOLOGY (3). An interdisciplinary approach to Greek and Roman myths, including their historical and contemporary relevance.

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.

483. DIRECTED READINGS IN CLASSICAL LANGUAGES (1-3). 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)

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.

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.

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.

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.

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.

301. ADVANCED RUSSIAN GRAMMAR AND COMPOSITION (3). PRQ: FLRU 202 or consent of department.

311. RUSSIAN CONVERSATION AND COMPOSITION (3). Intensive practical training in spoken and written Russian. PRQ: FLRU 202 or consent of department.

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.

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.

431. 19TH CENTURY RUSSIAN LITERATURE (3). Readings, lectures, and discussion of classic writers in various genres. Taught in English.

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.

433. RUSSIAN MODERNIST LITERATURE: 1881-1930 (3). Readings, lectures, and discussion of masterpieces of the modernist period. Taught in English.

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.

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.

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)

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.

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.

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.

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.

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.

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.

361. INTRODUCTION TO POLISH CULTURE (3). Polish culture and ideology from the beginning of the Polish state to modern times. Taught in English.

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.

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)

101. BEGINNING JAPANESE I (3). Developing skills in listening, speaking, reading, and writing.

102. BEGINNING JAPANESE II (3). Continuation of FLJA 101. PRQ: FLJA 101 or consent of department.

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.

202. INTERMEDIATE JAPANESE II (3). Continuation of FLJA 201. PRQ: FLJA 201 or consent of department.

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.

302. ADVANCED JAPANESE GRAMMAR AND COMPOSITION II (3). Continuation of FLJA 301. PRQ: FLJA 301 or consent of department.

311. ADVANCED JAPANESE CONVERSATION (3). Intensive practical training in conversational skills to achieve fluency of expression. PRQ: FLJA 202 or equivalent.

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.

361. INTRODUCTION TO JAPANESE CULTURE (3). Comprehensive introduction to Japanese culture and ideology, from ancient to modern times. Taught in English.

381. INTRODUCTION TO JAPANESE LANGUAGE AND BUSINESS PRACTICES (3). Includes Japanese business culture and etiquette.

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)

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.

104. BEGINNING KOREAN II (5). Continuation of FLKN 103. PRQ: FLKN 103 or consent of department.

Arabic (FLAR)

103. BEGINNING ARABIC I (5). Proficiency-based introduction to speaking, reading, and writing Modern Standard Arabic.

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 (3). Developing skills in listening, speaking, reading, and writing. PRQ: FLBU 104 or consent of department.

FLBU 204. INTERMEDIATE BURMESE II (3). 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. Only 1 credit can be taken per semester. Hours may not be applied towards the major or minor.

FLAL 415. INTERNSHIP IN FOREIGN LANGUAGES (3). Credit awarded upon completion of an internship experience and writing assignments related to student's field of study. Open to declared foreign language majors in French, German, or Spanish. Not available for credit to students with credit in ILAS 390. S/U grading. PRQ: Consent of department; junior or senior standing.

FLAL 420. INTRODUCTION TO TRANSLATION THEORY (3). Introduction to contemporary translation theory. Readings and training in different theoretical approaches in translation into English from other languages. Taught in English. PRQ: Junior or senior standing.

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: Junior level standing in French or Spanish, or consent of department.

FLIS 481. INDEPENDENT STUDY IN A FOREIGN LANGUAGE (1-6). 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 499. 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. Students 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 (1-2). Discipline-based clinical experience for students seeking initial middle-school or secondary licensure 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 "Educator Licensure Requirements" for other regulations. S/U grading. PRQ: FLMT 491 and consent of department.

FLST 181. ELEMENTARY LANGUAGE INSTRUCTION I (5). Developing skills in listening, speaking, reading, and writing in a less commonly taught language.

FLST 182. ELEMENTARY LANGUAGE INSTRUCTION II (5). Continuation of FLST 181. PRQ: FLST 181 in the same language or consent of the department.

FLST 281. INTERMEDIATE LANGUAGE INSTRUCTION I (3-5). Developing skills in listening, speaking, reading, and writing in a less commonly taught language at the intermediate level. PRQ: FLST 181 and FLST 182 in the same language, or consent of department.

FLST 282. INTERMEDIATE LANGUAGE INSTRUCTION II (3-5). Developing skills in listening, speaking, reading, and writing in a less commonly taught language at the intermediate level. PRQ: FLST 181, FLST 182, and FLST 281 in same language, or consent of department.

FLST 381. SPECIAL STUDIES IN LANGUAGE I (1-9). Special topics in the various foreign languages. Topics announced. Multiple enrollments in a single term are permissible. May be repeated to a maximum of 9 semester hours per language. PRQ: Consent of department.

FLST 382. SPECIAL STUDIES IN LANGUAGE II (1-9). Special topics in the various foreign languages. Topics announced. Multiple enrollments in a single term are permissible. May be repeated to a maximum of 9 semester hours per language. 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. Multiple enrollments in a single term are permissible. May be repeated to a maximum of 9 semester hours per language 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. Multiple enrollments in a single term are permissible. May be repeated to a maximum of 9 semester hours per language as topic changes. PRQ: Consent of department.

FLST 483. SPECIAL TOPICS IN LINGUISTICS (3). Topics announced. Multiple enrollments in a single term are permissible. May be repeated to a maximum of 6 semester hours per language 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

Katharina Barbe, Ph.D., Rice University, associate professor, chair
John R. Bentley, Ph.D., University of Hawaii, professor, assistant chair

Anne L. Birberick, Ph.D., University of Virginia, associate professor
Dennis E. Brain, Ph.D., University of Texas, associate professor
Louise Ciallella, Ph.D., University of Wisconsin, associate professor
Jessamine Cooke-Plagwitz, Ph.D., Queen's University, Kingston, Ontario, associate professor

Mary L. Cozad, Ph.D., University of California, Berkeley, assistant professor

John F. Hartmann, Ph.D., University of Michigan, Distinguished Teaching Professor, Board of Trustees Professor

Frances Jaeger, Ph.D., University of Illinois, associate professor

Joanna Kot, Ph.D., University of Chicago, associate professor

Karen Lichtman, Ph.D., University of Illinois at Urbana-Champaign, assistant professor

Maryline Lukacher, Ph.D., University of California, San Diego, professor

Eloy E. Merino, Ph.D., University of Miami, professor

Christopher Nissen, Ph.D., University of California, Berkeley, professor

Robert V. Reichle, University of Texas, Austin, assistant professor

Linda K. Saborio, Ph.D., University of North Carolina, Chapel Hill, associate professor

Francisco Solares-Larrave, Ph.D., University of Illinois, associate professor

Tharaphi Than, Ph.D., University of London, assistant professor

Stephen Vilaseca, Ph.D., University of Minnesota, Twin Cities, assistant professor

Philippe Willems, Ph.D., University of Colorado, Boulder, associate 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 with a major in meteorology. The major in geography has emphases in geography and geomatics. 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 may pursue a double major in geography and meteorology or the major in meteorology and a minor in geography.

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, global studies, Latino/Latin American studies, Southeast Asian studies, and urban studies.

Major in Geography

The emphasis in geography offers the opportunity to develop greater understanding of a specific aspect of geography by choosing electives from one of four areas of study: in area studies, geographic information systems (GIS), natural environmental systems, or urban/economic systems. With the proper set of electives, the student can meet federal civil service qualification standards as a soil scientist or hydrologist. The emphasis in geomatics integrates land surveying and mapping science.

Students pursuing the emphasis in geography may earn the B.A. or the B.S. degree; those pursuing the emphasis in geomatics must fulfill requirements for the B.S. degree.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1: 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 for 12 semester hours.

Both GEOG 391 and GEOG 491 may be included in these 12 hours for no more than 3 semester hours of credit in each.

Area Studies

Course work from the following

GEOG 303 - Water Resources and the Environment (3)
 GEOG 315X - Geography of Energy (3)
 GEOG 330 - Geography of the U.S. and Canada (3)
 GEOG 332 - Geography of Latin America (3)
 GEOG 335X - Migration (3)

GEOG 336 - Geography of Africa (3)
 GEOG 391D - Internship: Regional Geography (1-3)
 GEOG 338 - Geography of Asia (3)
 GEOG 408 - Tropical Environmental Hazards (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 (1-3)
 GEOG 498D - Seminar in Current Problems: Regional Geography (3)
 GEOG 498E - Seminar in Current Problems: Human Geography (3)

Geographic Information Systems

Course work from the following

GEOG 391J - Internship: Methods and Techniques (1-3)
 GEOG 391K - Internship: Mapping/Geovisualization (1-3)
 GEOG 407 - Technical Hazards (3)
 GEOG 455 - Land-Use Planning (3)
 GEOG 458 - Geovisualization (3)
 GEOG 459 - Geographic Information Systems (3)
 GEOG 460 - Remote Sensing of the Environment (3)
 GEOG 465 - Geographic Field Work (3)
 GEOG 467 - Workshop in Cartography (3)
 GEOG 468 - Workshop in GIS (3)
 GEOG 470 - Web Mapping (3)
 GEOG 490 - Community Geography (3)
 GEOG 491 - Undergraduate Research in Geography (1-3)
 GEOG 493 - Computer Methods and Modeling (3)
 GEOG 498J - Seminar in Current Problems: Methods and Techniques (3)
 GEOG 498K - Seminar in Current Problems: Mapping/Geovisualization (3)

Natural Environmental Systems¹

Course work from the following

GEOG 302 - Soil Science (4)
 GEOG 303 - Water Resources and the Environment (3)
 GEOG 306 - Severe and Hazardous Weather (3)
 GEOG 315X - Geography of Energy (3)
 GEOG 322 - Geography of World Plant Communities (3)
 GEOG 324X - Women in Science (3)
 GEOG 368 - Climate Change: Science, Impacts, and Mitigation (3)
 GEOG 370 - Regional Climatology (3)
 GEOG 391A - Internship: Physical Geography (1-3)
 GEOG 391B - Internship: Environmental Management (1-3)
 GEOG 402 - Pedology (4)
 GEOG 403 - Soil Geography and Land Use Planning (3)
 GEOG 404 - Soil Description and Interpretation (2)
 GEOG 406 - Natural Hazards and Environmental Risk (3)
 GEOG 407 - Technical Hazards (3)
 GEOG 408 - Tropical Environmental Hazards (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 491 - Undergraduate Research in Geography (1-3)
 GEOG 492 - Hydrology (3)

¹ Students will be better prepared for this area by fulfilling the B.S. degree requirements.

- GEOG 498A - Seminar in Current Problems: Physical Geography (3)
 GEOG 498B - Seminar in Current Problems: Environmental Management (3)

Urban/Economic Systems

Course work from the following

- GEOG 304 - Transportation Geography Credits: 3
 GEOG 315X - Geography of Energy (3)
 GEOG 324X - Women in Science (3)
 GEOG 362 - Geography of Urban Systems (3)
 GEOG 391G - Internship: Urban/Economic Geography (1-3)
 GEOG 403 - Soil Geography and Land Use Planning (3)
 GEOG 407 - Technical Hazards (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 (1-3)
 GEOG 498E - Seminar in Current Problems: Human Geography (3)
 GEOG 498G - 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 Emphasis 1, 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.

Emphasis 2: Geomatics (B.S.)

Requirements in Department (41)

- GEOG 101 - Survey of Physical Geography (3)
 GEOG 102 - Survey of Physical Geography Laboratory (1)
 GEOG 150 - Introduction to Geomatics (3)
 GEOG 202 - World Regional Geography (3),
 OR GEOG 204 - Geography of Economic Activities (3)
 GEOG 250 - Civil Surveying (4)
 GEOG 251 - Control Surveying (4)
 GEOG 256 - Maps and Mapping (3)
 GEOG 300 - Proseminar (1)
 GEOG 350 - Land Surveying (4)
 GEOG 359 - Introduction to Geographic Information Systems (3)
 GEOG 450 - Legal Aspects of Geomatics and Land Surveying (3)
 Course work from the following (9)
 GEOG 391M - Internship, Geomatics/Surveying (3)
 GEOG 403 - Soil Geography and Land Use Planning (3)
 GEOG 455 - Land Use Planning (3)
 GEOG 459 - Geographic Information Systems (3)
 GEOG 460 - Remote Sensing of the Environment (3)
 GEOG 468 - Workshop in GIS (3)
 GEOG 474 - Geomatics Design in Land Development (4)
 GEOG 475 - Geomatics Planning and Computation (3)
 GEOL 425 - Engineering Geology (3)

Requirements outside Department (15-16)

- *MATH 211 - Calculus for Business and Social Science (3),
 OR *MATH 229 - Calculus I (4)
 *PHYS 210 - General Physics I (4)
 *PHYS 211 - General Physics II (4)
 STAT 301 - Elementary Statistics (4)

Recommendations

Students interested in a career in land surveying will need to satisfy curricular and course requirements for the surveyor in-training examination. Students should consult with the undergraduate adviser early in their course of study for advice on fulfilling those requirements..

Total Hours for Emphasis 2, Geomatics: 56-57 (B.S.)

Major in Meteorology (B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (35)

- GEOG 105 - Introduction to the Atmosphere (3)
 GEOG 106 - Introduction to the Atmosphere Laboratory (1)
 GEOG 300 - Proseminar (1)
 MET 300 - Meteorology (4)
 MET 320 - Synoptic Meteorology (3)
 MET 360 - Radar Meteorology (3),
 OR GEOG 460 - Remote Sensing of the Environment (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 391C - Internship: Meteorology/Climatology (1-3)
 GEOG 406 - Natural Hazards and Environmental Risk (3)
 GEOG 408 - Tropical Environmental Hazards (3)
 GEOG 461 - Applied Statistics in Geographic Research (3)
 GEOG 491 - Undergraduate Research in Geography (1-3)
 GEOG 492 - Hydrology (3)
 GEOG 498C - Seminar in Current Problems: Meteorology/
 Climatology (3)
 MET 291 - Field Experience in Meteorology (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.

Professional Educator Licensure – Social Sciences: Geography

Students who want to be licensed to teach geography at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in geography.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education Program when they have

- established a file with the History and Social Sciences Secondary Teacher Education Program 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;

- passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

- 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;

- met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

- obtained approval from the of History and Social Sciences Secondary of Teacher Program.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Program.

Department Requirements

Students must complete the requirements for a degree in geography. In addition, they must complete GEOG 496X, History and Social Science Instruction for Secondary Educators. 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History and Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

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 (19)

Meteorology majors may declare the minor in geography.

- *GEOG 101 and *GEOG 102 - Survey of Physical Geography and Laboratory (4),
OR *GEOG 105 and *GEOG 106 - Introduction to the Atmosphere and Laboratory (4)
- *GEOG 202 - World Regional Geography (3),
OR *GEOG 204 - Geography of Economic Activities (3)
- GEOG 256 - Maps and Mapping (3)
- Electives from geography courses at the 300 or 400 level (9)
- Six or more semester hours in the minor must be taken at NIU.

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 391J - Internship: Methods and Techniques (1-6)
 - GEOG 391K - Internship: Mapping/Geovisualization (1-6)
 - GEOG 403 - Soil Geography and Land Use Planning (3)
 - GEOG 432 - Geography of Health (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 (3)
 - GEOG 468 - Workshop in GIS (3)
 - GEOG 470 - Web Mapping (3)
 - GEOG 490 - Community Geography (3)
 - GEOG 491 - Undergraduate Research in Geography (1-3)
 - GEOG 493 - Computer Methods and Modeling (1-3)
 - GEOG 498J - Seminar in Current Problems: Methods and Techniques (3)
 - GEOG 498K - Seminar in Current Problems: Mapping/Geovisualization (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.

150. INTRODUCTION TO GEOMATICS (3). Introduction to geomatics and the basic concepts, theories, and principles pertaining to land surveying. Origins of the land surveying profession and the history and role of land surveying in the U.S. Introduction to surveying equipment and methods, the types of surveys performed by a land surveyor, and the relationship of surveying to other mapping sciences. Basic techniques and computations for measuring land characteristics, including distance, direction, elevation and area. Lecture, laboratory and field experience.

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.

250. CIVIL SURVEYING (4). Elements of civil and engineering projects as they relate to land surveying. Planning and methods of data acquisition for topographic and landscape surveys. Elements and interpretation of engineering site plans in relation to the surveying needs. Use of imagery and 3-D scanning technologies. Surveying principles and practices for roadway, utility, and building layout. Lecture, laboratory and field experience. PRQ: GEOG 150.

251. CONTROL SURVEYING (4). Establishment and calculation of coordinate position by means of control surveys. Control and benchmark systems. Datums and projected coordinate systems and standards for converting between datums and coordinate systems. The National Spatial Reference System. Principles and methods of satellite positioning systems and their use in land surveying. Field methods of coordinate establishment and computation. Lecture, laboratory and field experience. PRQ: GEOG 150.

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 or GEOL 120 or ENVS 301; 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.

306. SEVERE AND HAZARDOUS WEATHER (3). Examination of fundamentals of atmospheric phenomena with an emphasis on understanding concepts and processes behind severe manifestations of weather and climate. Physical aspects of extratropical cyclones, winter weather phenomena, thunderstorm phenomena, tropical weather systems, and large-scale, longer-term weather events are analyzed. Case studies are employed to investigate human, economic, and environmental consequences of extreme weather and climate events.

315X. GEOGRAPHY OF ENERGY (3). *Crosslisted with ENVS 315*. Interdisciplinary overview of the geography of energy. Basics of energy literacy, including unit conversions and net energy analysis. Geographic components of current energy production, consumption and transportation, including fossil fuels and renewable energy resources. Major geographic, energetic, environmental and/or economic issues related to the continued production of energy. Comparison and contrast of energy options from a net energy perspective.

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.

332. GEOGRAPHY OF LATIN AMERICA (3). Selected topics in Latin America's social, economic, and political geography. Emphasizes problems of regional development.

335X. MIGRATION (3). *Crosslisted as SOCI 335*. Examines the national and international dynamics of migration, the causes and effects of migration, migration policies, and the experiences of immigrant communities in the United States and beyond. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

336. GEOGRAPHY OF AFRICA (3). Spatial analysis of the human and physical patterns of Africa.

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.

350. LAND SURVEYING (4). Discussion and history of the U.S. Rectangular System. Principals and practices of the Northwest Territory and Illinois State legal surveys including land acts and instructions. Legal document research and preparation. Illinois Land Survey System procedures and calculations. Retracement survey analysis and methods. Lecture, laboratory, and field experience. PRQ: GEOG 150.

352. GEOSPATIAL DIMENSIONS OF HOMELAND SECURITY (3). Planning and practicing homeland security and emergency response from a geospatial perspective. Integrating homeland security across jurisdictions and geographic scales, from local to national. Practical value of GIS, spatial data, and geospatial methods in planning, risk assessment and mitigation. Lecture and laboratory. Not open for credit to students with previous credit in GEOG 256.

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 GEOG 352 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

368. CLIMATE CHANGE: SCIENCE, IMPACTS, AND MITIGATION (3). Overview of the science of climate change and an analysis of the implications of this change on societies throughout the world. Spatial dimensions of climate change will be examined from a holistic perspective, taking into account interactions between the natural and man-made environment, impacted societies and the development of economic and social policies. Social and political ramifications of climate change have become apparent as local communities in different parts of the world struggle to adapt to new patterns of urban climate, excessive rainfall, prolonged droughts, and severe weather events.

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 (1-3). Current or special interest topics in the subfields of geography. May be repeated to a maximum of 9 semester hours as subject varies. Students may register for multiple sections of GEOG 390 simultaneously. PRQ: Consent of department.

391. INTERNSHIP (1-6).

- A. Physical Geography
- B. Environmental Management
- C. Meteorology/Climatology
- D. Regional Geography
- E. Human Geography
- G. Urban/Economic Geography
- J. Methods and Techniques
- K. Mapping/Geovisualization
- M. Geomatics/Surveying

Work as an intern in an off-campus agency or firm. A student completes intern tasks as assigned, does readings and prepare a paper under the supervision of a faculty member. Each letter category may be repeated to a maximum of 6 semester hours. S/U grading. PRQ: Consent of department.

401X. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ANTH 401X, ECON 401X, HIST 401, POLS 401X, PSYC 401X, and SOCI 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

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.

404. SOIL DESCRIPTION AND INTERPRETATION (2). Lecture, lab, and field experience involving description, interpretation, and classification of soil profiles and soil-landscape geographic relationships for agricultural, urban, and wildland use. Participate in soil judging contests. May be repeated to a maximum of 4 semester hours. PRQ: GEOG 302 or GEOG 402 or consent of department

406. NATURAL HAZARDS AND ENVIRONMENTAL RISK (3). Examination of processes that create environmental and atmospheric hazards, the spatial and temporal discontinuities associated with hazards, and societal aspects that affect and compound disasters. Historical and contemporary case studies are utilized to investigate the interaction between society and natural hazards. PRQ: GEOG 101 or GEOG 105 or GEOG 306 or GEOL 120 or consent of the department.

407. TECHNICAL HAZARDS (3). Study of the spatial problems associated with technical (human-made) hazards and the geographic scope of their impacts on human activities and the environment. Spatial dimension of risk and the role of geospatial information in mitigation, emergency response, planning, and management. Examination of the social and cultural context associated with technical hazards and regulatory issues in risk management. Emphasis on risk perception, risk analysis, hazard assessment and hazard management from geospatial and cultural perspectives. Lecture and laboratory. PRQ: GEOG 359.

408. TROPICAL ENVIRONMENTAL HAZARDS (3). Examination of natural hazards with a focus on Southeast Asia. Tsunamis, monsoons, typhoons, flooding, droughts, and urban hazards are explored. Interactions among the following three major systems are analyzed with respect to shaping these hazards: the physical environment, social and demographic characteristics, and components of the built environment. PRQ: GEOG 101 or GEOG 105 or GEOG 306 or GEOL 120 or consent of the 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 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, 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.

432. GEOGRAPHY OF HEALTH (3). Geographic dimensions of health in local and regional populations across the globe. Topics include disease ecology, infectious and chronic diseases, geographic mobility, biometeorology, nutrition, development and health, geographic disparities in health, healthcare resources and access, medical systems, concepts of health and place, therapeutic spaces, GIS and public health. Introduction to measurement in vital statistics and surveillance data will also be examined. Lecture and laboratory.

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.

436. GEOGRAPHY AND FILM (3). Studies the intersection of geography and film through visual and critical examination of landscape, culture and environment in the interpretation of world cinema. Focus on films whose location, culture or environment, are an essential backdrop in the cinematic experience.

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.

450. LEGAL ASPECTS OF GEOMATICS AND LAND SURVEYING (3). Standards of practice and conduct for legal surveys. Rights, liabilities, responsibilities and professional ethics for Professional Land Surveyors. Common and statutory law as it pertains to land and land ownership. Varying methods and types of conveyances and title. Types and uses for evidence in litigation of legal surveys and land boundaries. PRQ: GEOG 350.

451. POLITICAL GEOGRAPHY (3). Study of political phenomena in a real 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: 3 semester hours in geography or political science or 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 101 or GEOG 253 or ENVS 302 or ENVS 303 or ENVS 304, or consent of department.

455. LAND-USE PLANNING (3). Study of processes and policies in land use 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.

458. GEOVISUALIZATION (3). Theories, principles and approaches of geographic visualization. Fundamentals of cartographic representation, theoretical and practical issues of geovisualization, and developing methods in exploratory spatial data analysis, animation, 3-D representation, and virtual environments. Lecture and laboratory. PRQ: GEOG 359 or consent of department.

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 earth resource, meteorological, and environmental change information through photogrammetry and image processing techniques and applications of satellite, LIDAR, and radar remote sensing in earth and atmospheric sciences. Lecture and laboratory. PRQ: MATH 210 or MATH 211 or MATH 229.

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.

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 256.

465. GEOGRAPHIC FIELD WORK (3-8). Field problems of urban economic, cultural, and physical geography. Lecture, laboratory, and field experience. PRQ: Consent of department.

467. WORKSHOP IN CARTOGRAPHY (3). Problems and techniques of map development. Projects vary but include the processes of design and production, editing and quality control, and final implementation as printed product. Directed individual study. PRQ: GEOG 359 and consent of department.

468. WORKSHOP IN GIS (3). Problems and techniques of GIS prototype development. Emphasis on GIS development and spatial database management for public sector applications such as land parcel mapping, emergency services, facilities management, and homeland security. The processes of design and production, editing and quality control, and final implementation of an operational product are stressed through applied projects. PRQ: GEOG 359 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.

470. WEB MAPPING (3). Design and implementation of interactive, web-based geovisualizations. Theory of map-based, human-computer interaction and supporting data structures and communication techniques. Two hours of lecture and two hours of laboratory. PRQ: GEOG 359 and GEOG 467 or consent of department.

474. GEOMATICS DESIGN IN LAND DEVELOPMENT (4). Concepts and procedures for land development and land use. Discussion of common subdivision laws and municipal codes. Covenants and restrictions for protection of the public and design restrictions. Design and legal concepts of land development for miscellaneous other land development projects including industrial and recreational spaces. Lecture and laboratory. PRQ: GEOG 350.

475. GEOMATICS PLANNING AND COMPUTATION (3). Techniques and procedures for using information gathered during field work. Using previously collected field data in preparation of topographic maps. Preparing construction documents for field crews relating to civil or engineering project design. Interpreting subdivision documents for boundary analysis. Application of land survey theory to boundary analysis within a subdivision and the U.S. Public Land Survey System. Lecture and laboratory. PRQ: GEOG 350, GEOG 450.

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 (1-3). 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 211 or MATH 229.

493. COMPUTER METHODS AND MODELING (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 licensure 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 FOR SECONDARY EDUCATORS (3). *Crosslisted as ANTH 496X, ECON 496X, HIST 496, POLS 496X, PSYC 496X, and SOCI 496X*. Organization and presentation of materials for history and social science courses at the secondary levels. PRQ: Admission to the history or social science secondary teacher education program and permission of the Department of History's office of secondary teacher education.

497. STUDENT TEACHING (SECONDARY) IN GEOGRAPHY/ EARTH SCIENCES (7-12). 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 "Educator Licensure Requirements." PRQ: GEOG 496X and consent of department.

498. SEMINAR IN CURRENT PROBLEMS (3).

- A. Physical Geography
- B. Environmental Management
- C. Meteorology/Climatology
- D. Regional Geography
- E. Human Geography
- G. Urban/Economic Geography
- J. Methods and Techniques
- K. Mapping/Geovisualization

Selected topics in the various subfields of geography. May be repeated to a maximum of 6 semester hours as the topic changes. Students may register for multiple sections of GEOG 498 simultaneously. PRQ: Consent of department.

Meteorology (MET)

291. FIELD EXPERIENCE IN METEOROLOGY (1-3). Use of meteorological observations, maps, and remotely sensed imagery in an experiential framework to understand real-time weather conditions and weather system development. Emphasis on rapidly forming systems, mesoscale events, and severe weather. May be repeated to a maximum of 3 semester hours. S/U grading.

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.

360. RADAR METEOROLOGY (3). Principles of acquiring and interpreting atmospheric data from Doppler and polarimetric radars. Applications of radar in detection of mesoscale and microscale phenomena in operational meteorology and research. Two hours of lecture and two hours of laboratory. PRQ: GEOG 306 or 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, quasigeostrophic 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 life cycle 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 atmospheric and biophysical processes near the surface of the earth, procedures and methods in measuring interactions of soil-plant-air-water. Topics including radiation fluxes, turbulent transfer in momentum, heat, water vapor, carbon dioxide, and pollutant dispersal, biometeorology, agrometeorology, and local wind circulation. PRQ: MET 300 and CSCI 230 or CSCI 240, or consent of the department.

431. APPLICATIONS IN CLIMATOLOGY (3). Team research projects that apply climatological theory and statistical approaches 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 (1-3). May be repeated to a maximum of 6 semester hours. PRQ: Senior standing and consent of department.

Geography Faculty

Andrew J. Kremenec, Ph.D., Indiana University, professor, chair
Walker S. Ashley, Ph.D., University of Georgia, associate professor
David Changnon, Ph.D., Colorado State University, Distinguished Teaching Professor, Board of Trustees Professor
Xuwei Chen, Ph.D., Texas State University, assistant professor
Courtney M. Gallaher, Ph.D., Michigan State University, assistant professor
David Goldblum, Ph.D., University of Colorado, associate professor
Richard Greene, Ph.D., University of Minnesota, associate professor
Ryan D. James, Ph.D., University of North Carolina, Charlotte, assistant professor
Michael E. Konen, Ph.D., Iowa State University, associate professor
Wei Luo, Ph.D., Washington University, professor
Thomas J. Pingel, Ph.D., University of California, Santa Barbara, assistant professor
Lesley S. Rigg, Ph.D., University of Melbourne, professor
Jie Song, Ph.D., University of Delaware, professor
James L. Wilson, Ph.D., University of North Carolina, assistant 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 educator licensure 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 educator licensure.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Geology

Requirements in Department (44)

GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
 GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (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)
 Upper-division GEOL course work, which may include senior thesis, selected in consultation with undergraduate adviser (15)

Requirements outside Department (24)

Please note corequisite information in course descriptions.

*CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
 *MATH 229 - Calculus I (4), and MATH 230 - Calculus II (4)
 *PHYS 210 and *PHYS 211 - General Physics I and II (8)
 OR *PHYS 253 and *PHYS 273 - Fundamentals of Physics I and II (8)

Total Hours for Emphasis 1, Geology: 68

Emphasis 2. Environmental Geosciences

Requirements in Department (32-36)

GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
 GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (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),
 OR an approved substitute taken at another university (4)
 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 (32-36)

*CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
 Any of the two-semester laboratory science sequences, other than CHEM or GEOL, listed under the College of Liberal Arts and Sciences "College Requirement for the B.S. Degree" in the Undergraduate Catalog. These would normally be selected to complement the cross-disciplinary focus. Substitutions for special reasons, such as to satisfy a minor, may be approved by the undergraduate adviser. (8)
 *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)

Upper-division course work³ selected with approval of undergraduate adviser, from the Departments of Biological Sciences, Chemistry and Biochemistry, Economics, Geography, Physics, and/or Political Science. (9-12)

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 departments must together total to a minimum of 20 hours.

Total Hours for Emphasis 2, Environmental Geosciences: 64-68

* Available for general education credit.

² With written approval of the departmental undergraduate adviser, students with a special interest in ecology and/or paleontology may substitute BIOS 103 and BIOS 105 and BIOS 209 and BIOS 211 for PHYS 210 and PHYS 211 (or PHYS 253 and PHYS 273).

³ A cross-departmental pre-law sequence is also available. Students desiring to pursue other disciplines may petition the department's Undergraduate Committee.

Emphasis 3. Earth Science Education²**Requirements in Department (40-42)**

GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)
 GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (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 (12)

GEOL 103 - Planetary and Space Science (3),
 OR *PHYS 162 - Elementary Astronomy (3)
 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 licensure coordinator, from other areas of earth science, usually physical geography, meteorology, or astronomy (3)

Environmental Science (12-13)

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 - Environmental Law and Policy (3)
 SOCI 364 - Environmental Sociology (3)

Requirements outside Department (43-49)

ETT 402- Teaching and Learning with Technology (3)
 *GEOG 105 - Introduction to the Atmosphere (3)
 *CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - 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)
 BIOS 208 - Fundamentals of Biology I (3), and BIOS 210 - Fundamentals of Biology I Laboratory (1),
 BIOS 209 - 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 (1-2)

*MATH 229 - Calculus I (4),
 OR *MATH 155 - Trigonometry and Elementary Functions (3), and MATH 211 - Calculus for Business and Social Science (3), and STAT 301 - Elementary Statistics (4)
 One course approved for use in the department's teacher preparation programs in each of the following areas (6)
 EPS 406 - Educational Psychology (3)
 TLSE 457 - Educating the Exceptional Child (3)

Total Hours for Emphasis 3, Earth Science Education: 83-90

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.

Educator Licensure

Students seeking initial licensure either in earth and space science or in environmental science to teach in grades 6-12 (Standard High School License) must schedule an interview with the departmental licensure coordinator to formulate a specific plan of study.

Students seeking licensure usually will also major in geology and environmental geosciences. Because licensure 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 licensure requirements must be approved by the departmental licensure coordinator each semester before registering. Students are responsible for timely submission of the several applications and permits required during the program.

Students³ transferring geology course credits from other institutions will complete additional NIU courses as determined by the departmental licensure coordinator.

Admission Requirements¹

Application in writing to the departmental licensure coordinator.

Completion of *COMS 100, *ENGL 103, *ENGL 104, *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 Test of Academic Proficiency.

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 interview with the coordinator in which the student demonstrates attitudes and motivations appropriate to the professional educator.

* Available for general education credit.

¹ Requirements listed in these sections are minimum requirements. Meeting these requirements will not guarantee students admission to the geology and environmental geosciences educator licensure program or courses.

² Completion of this emphasis does not fulfill all requirements for initial educator licensure.

³ Individuals who want to obtain initial licensure as postgraduates or while majoring in another area should consult the departmental licensure coordinator. Students who want to obtain initial licensure while enrolled in a graduate program or as students-at-large should consult the Graduate Catalog and the departmental licensure coordinator.

Retention Requirements¹

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 licensure 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 educator licensure.

Passing score on the ILTS Content Area Test prior to student teaching.

Completion Requirements

Earth and Space Science Educator Licensure

All retention requirements listed above.

Clinical hours to be completed in ILAS 201, ILAS 301 and GEOL 401.

GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (4)

GEOL 325 - Solid Earth Composition (4)

GEOL 330 - Global Cycles (4)

GEOL 335 - Dynamics and Structure of the Earth (4)

GEOL 429 - Inquiry-Based Field Experiences for Earth Science Teachers (3)

GEOL 475 - Science Across Time and Culture (2)

GEOL 482 - Transition to the Professional Earth Science Teacher (1)

GEOL 483 - Interdisciplinary Teaching of Science in Secondary Education (3)

GEOL 487 - Student Teaching (Secondary) in Geology/Earth Science (7-12)

GEOL 495X - Teaching of Physical Sciences (3)

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

3 semester hours on the psychology and teaching of the exceptional child

3 semester hours of educational psychology focusing on the middle and high school student

Environmental Science Educator Licensure

All retention requirements listed above.

Clinical hours to be completed in ILAS 201, ILAS 301 and GEOL 401.

GEOL 105 - Environmental Geology (3)

GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (4)

GEOL 325 - Solid Earth Composition (4)

GEOL 330 - Global Cycles (4)

GEOL 335 - Dynamics and Structure of the Earth (4)

GEOL 475 - Science Across Time and Culture (2)

GEOL 482 - Transition to the Professional Earth Science Teacher (1)

GEOL 483 - Interdisciplinary Teaching of Science in Secondary Education (3)

GEOL 487 - Student Teaching (Secondary) in Geology/Earth Science (7-12)

GEOL 495X - Teaching of Physical Sciences (3)

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

3 semester hours of educational psychology focusing on the middle and high school student

The State of Illinois has established course and standards-based requirements for licensure. Approved licensure 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 licensure 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 Test of Academic Proficiency and secondary license subject matter examinations of the Illinois Licensure Testing System, and demonstration that the candidate has met science teaching standards.

Contact the licensure coordinator for information on the necessary criteria that experiences must meet to demonstrate fulfillment of licensure requirements.

For extra-departmental requirements see "Educator Licensure Requirements" and the departmental licensure 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 210 - General Chemistry I (3)

*CHEM 212 - General Chemistry Laboratory I (1)

*GEOL 120 - Introductory Geology (3), and GEOL 121 - Introductory Geology Laboratory (1)

GEOL 322 - Paleogeography, Paleoclimatology, Paleoecology (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 of likely outcomes from human impacts on the ocean environment in the context of a basic understanding of ocean processes.

* Available for general education credit.

¹ 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.

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 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. Not available for credit for majors. Except with departmental approval students may not receive credit from both GEOL 320 and GEOL 322. PRQ: A 100-level or higher natural science course.

322. PALEOGEOGRAPHY, PALEOCLIMATOLOGY, PALEOECOLOGY (4). Designed for Geology and Environmental Geosciences majors and minors. Methods and techniques for analysis of geological deposits, and records of geohistory of biological communities and environments on the Earth's surface. Discussion and application of new and classical tools in reconstruction of past environments and geography and fossil evidence of biotic evolution and analysis of fossil communities over time. Lectures, laboratory, and a field trip. Except with departmental approval, students may not receive credit from both GEOL 320 and GEOL 322. PRQ: GEOL 120 and GEOL 121, or consent of department.

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 three- or four-day field trip. PRQ: GEOL 120 and GEOL 121, or consent of the department.

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 322, CHEM 210, 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 322 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.

350. INTERNSHIP IN GEOSCIENCES (1-6). Internship in an off-campus public or private agency, organization, or company in a field related to Geology and Environmental Geosciences, under the academic supervision of department undergraduate adviser. May be repeated to a maximum of 6 semester hours. Credit earned in GEOL 350 may not be used to fulfill department requirements for undergraduate degrees. S/U grading. PRQ: GEOL 322 and GEOL 325 or consent of department.

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 precalculus level. PRQ: GEOL 120 and GEOL 121; or GEOG 101 and GEOG 102; and MATH 155 or MATH 211 or MATH 229 or higher.

399. 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.

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 322 and GEOL 330, or consent of department.

404. DEPARTMENTAL SEMINAR (1). Weekly presentations by graduate students, staff, and guests. Credit earned in GEOL 404 may not be used to fulfill department requirements for undergraduate degrees. May be repeated a maximum of 4 semesters. S/U grading. CRQ: GEOL 322 and GEOL 325 or consent of the 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 322 and GEOL 325, or consent of department.

407. GLOBAL CLIMATE CHANGE THROUGH TIME (3). Exploration of past climate and how this is relevant to modern and future climate change. Sedimentary rocks, ice, and a variety of organic remains are libraries housing a diverse number of proxies that paleoclimatologists can use for their detective work in deciphering how Earth's climate has changed in the past and to attribute causes that have driven those changes. PRQ: Junior or senior standing, or consent of the department.

409X. WATER QUALITY (4). *Crosslisted as ENVS 409 and BIOS 409X and PHHE 409X.* Survey of microbiological and chemical parameters affecting water quality and their associated public health aspects. Topics include microbial detection methods, waterborne disease, organic and inorganic parameters, drinking water, wastewater treatment plants, source water, and risk assessment. Lectures, laboratories, and a field trip. PRQ: CHEM 110 and CHEM 111; or consent of the department.

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 211, 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.

415. IGNEOUS AND METAMORPHIC PETROLOGY (4). Introduction to origin and properties of magma, magmatic differentiation, geochemistry of igneous rocks, igneous textures and their origins, agents and types of metamorphism, metamorphic textures and their origins, metamorphic facies, metamorphic reactions and phase equilibria. 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 211, 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 211, 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 211 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, MATH 211 or MATH 229, 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 211 or 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. PLATE TECTONICS (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.

464. EARTHQUAKE GEOPHYSICS (3). Comprehensive overview of earthquake causes and effects. Review of recent destructive earthquakes and earthquake hazards. Locating earthquakes, estimating magnitude and quantitative evaluation of earthquake sources, first-motions, and stress conditions along seismically-active faults. Properties of the crust, mantle, and core deduced from earthquake waves. Earthquake triggering mechanisms, reservoir-induced seismicity, and earthquake prediction. 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 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 MICROPALAEONTOLOGY (3). *Crosslisted as BIOS 466X*. Morphology, classification, paleogeography, stratigraphic application, and geochemistry of calcareous, siliceous, and phosphatic microfossils. PRQ: GEOL 322, 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 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, GEOL 335, and GEOL 405. CRQ: GEOL 479.

479. GEOLOGIC FIELD WORK (3). Continuation of field camp. CRQ: GEOL 478.

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 licensure 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.

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 (7-12). Student teaching in grades 6-12, assignments made by the Department of Geology and Environmental Geosciences. Also see "Educator Licensure 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 211 and CHEM 212; and MATH 229 or MATH 211; or consent of department.

489. UNDERGRADUATE RESEARCH (1-3). 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: GEOL 120 and GEOL 121 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 325, PHYS 210 or PHYS 253, 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 211 or MATH 229.

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: MATH 211 or MATH 229, PHYS 210 or PHYS 253, or consent of department.

494. SPECIAL TOPICS IN GEOLOGY AND ENVIRONMENTAL GEOSCIENCES (1-3). 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 licensure 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 (1-3). 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 (1-3). 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.

499. SENIOR THESIS - HONORS (1-3). 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, professor emeritus

Philip J. Carpenter, Ph.D., New Mexico Institute of Mining and
Technology, professor

Justin P. Dodd, Ph.D., University of New Mexico, assistant
professor

Mark P. Fischer, Ph.D., Pennsylvania State University, professor

Mark R. Frank, Ph.D., University of Maryland, associate professor

Nicole D. LaDue, Ph.D., Michigan State University, assistant
professor

Melissa E. Lenczewski, Ph.D., University of Tennessee, associate
professor

Carla W. Montgomery, Ph.D., Massachusetts Institute of
Technology, professor emeritus

Eugene C. Perry, Jr., Ph.D., Massachusetts Institute of Technology,
professor emeritus

Ryan M. Pollyea, Ph.D., University of Idaho, assistant professor

Ross D. Powell, Ph.D., Ohio State University, Distinguished
Research Professor, Board of Trustees Professor

Reed P. Scherer, Ph.D., Ohio State University, Distinguished
Research Professor, Board of Trustees Professor

Nathan D. Stansell, Ph.D., University of Pittsburgh, assistant
professor

Paul R. Stoddard, Ph.D., Northwestern University, associate
professor

James A. Walker, Ph.D., Rutgers University, professor

Department of History (HIST)

Major in History (B.A. or B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (40)

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 170 - World History I: Problems in the Human Past (3)
- HIST 171 - World History II: Problems in the Human Past (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 with a minimum of one course in each of Group A, B, and C; and four additional electives.

HIST 295 - Historical Methods (3) (Required of all majors in their sophomore or junior year).

HIST 495¹ - Senior Thesis (4)

Group A: (HIST 300, HIST 301, HIST 302, HIST 303, HIST 304, HIST 305, HIST 306, HIST 311, HIST 319, HIST 323, HIST 336, HIST 340, HIST 342, HIST 344, HIST 348, HIST 350, HIST 357, HIST 360, HIST 407, HIST 408, HIST 414, HIST 416, HIST 420, HIST 421, HIST 422, HIST 458, HIST 459, HIST 490A, HIST 490B)

Group B: (HIST 339, HIST 341, HIST 343, HIST 345, HIST 346, HIST 349, HIST 351, HIST 352, HIST 353, HIST 381, HIST 382, HIST 383, HIST 386, HIST 387, HIST 388, HIST 389, HIST 402, HIST 428, HIST 440, HIST 441, HIST 442, HIST 443, HIST 444, HIST 445, HIST 446, HIST 447, HIST 448, HIST 449, HIST 481, HIST 482, HIST 483, HIST 484, HIST 485, HIST 486, HIST 487, HIST 490G, HIST 490J, HIST 490N, HIST 490R, HIST 490U)

Group C: (HIST 312, HIST 313, HIST 315, HIST 322, HIST 324, HIST 326, HIST 327, HIST 328, HIST 337, HIST 338, HIST 354, HIST 355, HIST 356, HIST 358, HIST 359, HIST 361, HIST 362, HIST 363, HIST 364, HIST 365, HIST 366, HIST 367, HIST 368, HIST 369, HIST 370, HIST 371, HIST 372, HIST 373, HIST 374, HIST 375, HIST 376, HIST 377, HIST 378, HIST 379, HIST 380, HIST 402, HIST 413, HIST 418, HIST 423, HIST 424, HIST 425, HIST 426, HIST 429, HIST 434, HIST 435, HIST 452, HIST 453, HIST 454, HIST 460, HIST 461, HIST 462, HIST 463, HIST 464, HIST 465, HIST 466, HIST 467, HIST 468, HIST 471, HIST 472, HIST 473, HIST 474, HIST 475, HIST 476, HIST 477, HIST 478, HIST 479, HIST 490C, HIST 490D, HIST 490E, HIST 490M)

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: 40-52 (B.A.) OR 50-55 (B.S.)

Professional Educator Licensure – Social Sciences: History

Students who want to be licensed to teach history at the secondary level should declare their intention with the department's History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in history.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education Program when they have:

- established a file with the History and Social Sciences Secondary Teacher Education Program 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;

- passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

- 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;

- met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

- obtained approval from the History and Social Sciences Secondary Teacher Education Program.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program

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 for Secondary Educators, and HIST 400, Student Teaching in History/Social Sciences for Secondary Educators. 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 licensure.

Other Requirements

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History and Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

¹ Students must successfully complete HIST 295, and at least one 400-level NIU history course (excluding HIST 400 and HIST 496) before taking HIST 495. At least two such 400-level NIU history courses (excluding HIST 400, HIST 495, and HIST 496) are required to complete the major.

Placements

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

History Honors Program

A program of honors work in history is available to majors, which is separate from but complementary to the University Honors Program. Eligible students may enroll in one or both programs simultaneously, since requirements are similar. Admission to the departmental program is either by application of the student or by nomination from History faculty. Students who enter the program must have and maintain a cumulative GPA of at least 3.00 in all course work at NIU and at least 3.50 in history courses. Applications and nominations are made to the Director of Undergraduate Studies 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.

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 495, and maintain the GPA requirements stated above. Most history honors courses are not separate courses but rather subsections of regular courses. HIST 495 will count toward the required 18 semester hours of honors work in history. With the approval of the undergraduate committee, students can contract to do special work (study abroad, field schools, language training, internships, or other experience) that will substitute for up to 6 semester hours of history honors courses. For more information, contact the department's Director of Undergraduate Studies.

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 170 - World History I: Problems in the Human Past (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

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.

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.

170. WORLD HISTORY I: PROBLEMS IN THE HUMAN PAST (3). Thematic, comparative overview of major problems in human history before ca. 1500. Emphasis varies by instructor.

171. WORLD HISTORY II: PROBLEMS IN THE HUMAN PAST (3). Thematic, comparative overview of major problems in human history since ca. 1500. Emphasis varies by instructor.

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.

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.

295. HISTORICAL METHODS (3). Introduction of the basic tools required by all history majors in researching and analyzing historical materials and understanding historiographical trends. PRQ: History major.

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 Mediterranean 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.

304. LATE ANTIQUITY AND THE FALL OF ROME (3). History of the third to sixth centuries A.D., traditionally associated with the Fall of Rome throughout the Mediterranean basin. Transformation of vibrant classical and near eastern heritages of the late Roman Empire, first barbarian kingdoms, early Byzantine Empire, and early Islamic caliphate.

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-10th century 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.

311. EARLY MODERN FRANCE, 1500-1789 (3). French history from the Renaissance to the outbreak of the Revolution. Examination of France's monarchic government, court society, noble culture, merchant commerce, and agrarian economy. Special attention to religious wars, state development, imperialism, and Enlightenment movement that defined early modern France.

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. MODERN GERMANY SINCE 1871 (3). German history from the founding of the Second Reich, including state-building, imperialism, social developments, world wars and genocide, national socialism, the creation of two cold-war states and their unification in 1990, with focus on how German identity has been defined across political regimes.

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.

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.

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 Mendeleev, 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.

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.

339. FRENCH OVERSEAS EMPIRE (3). Examines major themes in the history of imperialism through the case of France's colonial ventures in North America, the Caribbean, Southeast Asia, sub-Saharan Africa, and North Africa. Spans the modern period, from first encounters with "New World" inhabitants during the age of exploration to the present. Emphasis on motives and justifications for empire; dynamics of race, gender, and religion in France's colonies; forms of colonial violence; decolonization; and post-colonial political, cultural, and economic interactions.

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.

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.

354. HISTORY OF BLACK AMERICAN BUSINESS AND ENTREPRENEURSHIP (3). Analysis, synthesis, and interpretation of the history of black business and entrepreneurship in the United States from the colonial period to the present, including a look at West African business antecedents.

355. HISTORY OF BLACK AMERICAN MUSIC (3). Examination and exploration of issues under scholarly debate on the history of black music in the United States. Emphasis on social and political contexts for creation of music by black Americans.

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.

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. EARLY ENCOUNTERS IN NATIVE NORTH AMERICA (3). Examination of the earliest encounters between Native Americans and newcomers to 1800. Topics include Native North America before European arrival, how Native Americans made sense of newcomers after 1492, the diversity of first encounters and exchanges, the development of a new world, and the conflicts and wars that arose over time.

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 HUNT FOR "UN-AMERICANS" IN U.S. HISTORY (3). Examination of forces in U.S. society that initiated repression of rights and surveillance campaigns against those deemed "un-American" threats to U.S. society. Topics include immigration, labor, and race panics; wars of the 20th century and the construction of the surveillance state; repression of protest movements; response to 9/11.

363. 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. STRIKES, RIOTS, AND UPRISINGS IN U.S. HISTORY (3). Focus on selected strikes, riots, insurrections in U.S. history. Topics vary by semester. Explorations of the meanings of specific events to understand the role of conflict in American life, their causes, and long-term significance.

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.

378. 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.

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.

385. HISTORY OF CHILDHOOD (3). Introduction to the history of children and youth; temporal and regional focus varies by instructor. Topics include: birth, growth, and maturation; family life; work; education; play; religion; gender and sexuality; race and ethnic identity.

386. HISTORY OF HUMAN RIGHTS (3). Historical emergence and evolution of "human rights" as idea, aspiration, and socio-political practice. Focus on debates about origins of human rights; whether it expresses Western or universal values; development of human rights advocacy; and roles played by states, non-governmental organizations, individuals, and the media in globalization of human rights over the past two centuries.

387. HISTORY OF GENOCIDE (3). Examination of the intertwined issues of genocide and human rights focusing on the causes, course of events, and consequences since the advent of the twentieth century. Specific case studies will be examined along with the historical and political foundations.

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), postcolonialism, and the contemporary issues facing island peoples. Emphasis on the Pacific as mythic realm and troubled reality.

389. GLOBAL CLIMATE HISTORY (3). Interaction of climate and humans from the deep past to the present. Topics include the influence of climatic patterns on early human populations, the Little Ice Age, the political and social ramifications of volcanic eruptions and El Niño events, and global warming.

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.

395. INTERNSHIP IN HISTORY (3). Internship in history-related field (e.g., archive, museum, historical society, historical publishing and editing). Minimum of 120 work hours per semester, plus periodic meetings with faculty supervisor. Submission of substantial written and/or oral report, addressing historical significance of project. Projects must be arranged and approved by faculty supervisor and college coordinator of internships by start of semester. PRQ: Declared history major or minor; and 60 credit hours or consent of department.

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.

399. HONORS SEMINAR (3). Topics announced. May be repeated to a maximum of 6 semester hours when topic varies. PRQ: Admission to University Honors Program or departmental Honors Program.

400. STUDENT TEACHING IN HISTORY/SOCIAL SCIENCES FOR SECONDARY EDUCATORS (12). Student teaching for one semester. Assignments arranged with the department's office of secondary teacher certification education. S/U grading. PRQ: HIST 496 and permission of the department's office of secondary teacher education.

401. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ANTH 401X, ECON 401X, GEOG 401X, POLS 401X, PSYC 401X, and SOCI 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

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.

407. MEDIEVAL WOMEN (3). Social, religious, cultural and economic history of women during Late Antiquity and the Middle Ages c. 200 to c. 1500. Topics include effects of Christianity upon women in the Roman world, motherhood, religion, life cycle, education, medicine, work, power, and comparisons to Jewish and Muslim women.

408. MEDIEVAL EVERYDAY LIFE (3). Examination of economic and social changes during the Middle Ages. Attention given to family life, demographic change, urbanization, and social movements.

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 difference.

414. EUROPEAN WARS OF RELIGION, 1520-1660 (3). Cultural and social aspects of religious and civil conflict during the Dutch Revolt, the French Wars of Religion, the Thirty Years' War, and the English Civil Wars. Multiple aspects of religious violence, from iconoclasm and bookburning to executions of heretics and religious massacres.

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.

418. MODERN EUROPEAN CULTURAL HISTORY (3). Intellectual foundations and cultural dimensions of European modernity, with particular focus on the modern self, mass culture, consumer society, the avant-garde, and the intersection of culture and politics.

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.

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.

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. **GENDER AND WAR (3).** History and historiography of gender and war in comparative context. Emphasis on close reading of selected secondary sources.

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.

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.

440. **ISLAM AND COLONIALISM IN AFRICA (3).** Islamic encounters with and resistance to European imperialism from the colonial conquest and partition of Africa to the eve of African independence.

441. **THE AFRICAN DIASPORA (3).** Major themes in the historical study of the African diaspora in the trans-Atlantic, trans-Saharan, and Indian Ocean regions. Development of African communities, cultures, ethnicities, religions, and identities under conditions of enslavement or forced migration, and processes of identification in the diaspora with the African homeland; New World developments such as creolization, the construction of multiple identities, and the positioning of enslaved Africans within the dynamics of the emergent Atlantic World. Geographic focus may vary depending on instructor.

442. **HISTORY OF BUDDHIST SOUTHEAST ASIA (3).** History of Southeast Asian countries whose rulers adopted Buddhism (Burma, Thailand, Laos, Cambodia, and Vietnam), as well as parts of island Southeast Asia. Colonialism, modernity, and conflict are discussed, with special attention to relationship between Buddhism and the nationalist and popular movements of the twentieth century.

443. **HISTORY OF ISLAMIC SOUTHEAST ASIA (3).** Historical development of Islam in Southeast Asia (Indonesia, Malaysia, Brunei) and ongoing conflicts between the state and Muslim minorities in Burma, Thailand, and the Philippines.

444. **JAPANESE EMPIRE (3).** Rise and fall of Japan as an imperial power, ca. 1870-1945. Emphasis on strategic, economic, and ideological motivations for imperial expansion; mechanisms of formal empire in Korea, Taiwan, and Micronesia; informal empire in Manchuria, China, and Southeast Asia; Pan-Asian collaboration; and Asian nationalist resistance to Japanese rule.

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.

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.

453. **HISTORY OF NORTHERN IRELAND (3).** History of Northern Ireland from 1920 to the present, with particular attention to the origins, nature, and legacies of the so-called Irish Troubles.

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.

458. **MEDITERRANEAN WORLD, 1450-1750 (3).** History of early modern North African, European, Anatolian, and Levantine societies rimming the Mediterranean Sea. Themes include maritime commerce, urbanization, gender relations, ethnic identities, and political developments in the Mediterranean region.

459. **THE ATLANTIC WORLD, 1492-1860s (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.

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 postwar 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. **THE U.S. IN DEPRESSION AND WAR, 1929-1960 (3).** The U.S. during the Great Depression, World War II, and the Cold War. Topics include the New Deal, social and political change in mid-century America, and the origins and meaning of the WWII and Cold War conflicts.

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.

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.

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.

481. INDIGENOUS MEXICO (3). Maya and Aztec cultures from European contact to the end of the colonial period in 1821. Focus on indigenous culture, religion, political life, conquest and resistance, disease and population decline, and changes and continuities of precolonial and colonial indigenous thought.

482. MEXICO SINCE 1810 (3). The quest for independence—political, economic, and cultural—with attention to the revolution of 1910-1920.

483. AFRICANS IN COLONIAL LATIN AMERICA (3). Afro-Latin Americans and their contributions to empire building as slaves, litigants, conquistadors, militia members, Christians, and Spanish and Portuguese imperial subjects. Emphasis on relations between slaves and free people of color, African-indigenous alliances and relationships, maroon communities, emergence of Afro-Creole and Afro-Christian consciousness, and resistance, compliance, and accommodation to the imperial project.

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.

487. THE LATIN AMERICAN CITY (3). Urbanization and urban life in Latin America from colonial times to the present, with an emphasis on rapid rural-to-urban migration in the twentieth century and the rise of mega-cities.

490. 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.

492. Introduction to 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.

493. INDEPENDENT STUDY (1-4). Independent research for qualified students. Consent of the faculty member with whom the student wishes to study is necessary. May count toward appropriate field requirement in the History major, depending on topic. May not be repeated.

494. 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.

495. 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 regularly with his or her research adviser. PRQ: History major, senior standing, HIST 295, successful completion of at least one 400-level NIU history course (excluding HIST 400 and HIST 496, and consent of department.

496. HISTORY AND SOCIAL SCIENCE INSTRUCTION FOR SECONDARY EDUCATORS (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 secondary levels. PRQ: Admission to the history or social science secondary educator licensure education program and permission of the Department of History's office of secondary educator licensure education.

History Faculty

James D. Schmidt, Ph.D., Rice University, professor, chair
 Anita M. Andrew, Ph.D., University of Minnesota, associate professor
 Stan Arnold, Ph.D., Temple University, assistant professor
 E. Taylor Atkins, Ph.D., University of Illinois, Presidential Teaching Professor
 Bradley Bond, Ph.D., Louisiana State University, associate professor
 Jerome Bowers, Ph.D., Indiana University, associate professor
 Andrew Bruno, Ph.D., University of Illinois, assistant professor
 Kenton Clymer, Ph.D., University of Michigan, Distinguished Research Professor
 Sundiata Djata, Ph.D., University of Illinois, professor
 Sean Farrell, Ph.D., University of Wisconsin, associate professor
 Heide Fehrenbach, Ph.D., Rutgers University, Distinguished Research Professor, Board of Trustees Professor
 Damián Fernández, Ph.D., Princeton University, assistant 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, associate professor
 Michael J. Gonzales, Ph.D., University of California, Berkeley, Distinguished Research Professor
 Anne G. Hanley, Ph.D., Stanford University, associate professor
 Beatrix Hoffman, Ph.D., Rutgers University, professor
 Kristin Huffine, Ph.D., University of California, Berkeley, associate professor
 Trude Jacobsen, Ph.D., University of Queensland, associate professor
 Eric Jones, Ph.D., University of California, Berkeley, associate professor
 Natalie Joy, Ph.D., University of California, Los Angeles, assistant professor
 Emma Kuby, Ph.D., Cornell University, assistant professor
 Vera Lind, D. Phil., Christian-Albrechts-Universität Kiel, associate professor
 Amanda Littauer, Ph.D., University of California, Berkeley, assistant professor
 Eric W. Mogren, Ph.D., University of Michigan, associate professor
 Ismael Montana, Ph.D., York University, assistant professor
 Barbara M. Posadas, Ph.D., Northwestern University, professor
 Brian Sandberg, Ph.D., University of Illinois, associate professor
 Andrea Smalley, Ph.D., Northern Illinois University, assistant professor
 J. Harvey Smith, Ph.D., University of Wisconsin, associate professor
 Nancy Wingfield, Ph.D., Columbia University, 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, mathematics education, and actuarial science. Successful completion of the emphasis in mathematics education leads to licensure to teach at the 6-12 grade levels.

The department also offers minors in mathematical sciences, elementary mathematics education, applied probability and statistics, and actuarial science. 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, the emphasis in actuarial science, a degree with honors in probability and statistics, a minor in applied probability and statistics or a minor in actuarial science 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 and professional education 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.

With department permission, students are allowed to complete certain combinations of the major and one or more minors in the department, or multiple minors within the department. In all such cases, for each minor in the department, the student must earn at least 6 semester hours in MATH/STAT courses that are not counted in fulfillment of the major or any other minors in the department.

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. General

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 - Abstract Algebra I (3)
 MATH 421 - Abstract 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 (6-8).

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: 44-46

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 (40-43)

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 (6-7)

MATH 420 - Abstract 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),
 OR MATH 442 - Elements of Partial Differential Equations (3)
 MATH 440 - Elements of Complex Analysis (3)
 MATH 444 - Linear Programming and Network Flows (3)
 MATH 460 - Modeling Dynamical Systems (3)
 STAT 470 - Introduction to Probability Theory (3)
 STAT 483 - Stochastic Processes I (4)

Additional mathematical sciences course (3-4)

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: 44-47

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 - Abstract 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 340 (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 (40-43)

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 (6-8)

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 479 - Practice of Bayesian Statistics (3)
 STAT 483 - Stochastic Processes I (4)
 STAT 491 - Programming and Computing in Statistics (3)

At least 3 additional semester hours from among the following courses (3-4)

MATH 420 - Abstract 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 382 - Theory of Interest and Financial Derivatives (4)
 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 479 - Practice of Bayesian Statistics (3)
 STAT 481 - Probabilistic Foundations in Actuarial Science (3)
 STAT 483 - Stochastic Processes I (4)
 STAT 491 - Programming and Computing in Statistics (3)
 STAT 493 - Special Topics in Statistics (1-3)

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: 44-47

Internship opportunities in statistics are available with many employers, including pharmaceutical companies, insurance companies, manufacturing companies, and government agencies.

Emphasis 5. Mathematics Education

The requirements listed below for the emphasis in Mathematics Education apply to students who complete the program before the fall semester 2014. Students who anticipate completing the program after summer 2014 should consult their advisers.

Successful completion of the emphasis in mathematics education leads to licensure to teach at the 6-12 grade levels. To be licensed to teach secondary school mathematics (6-12 grade levels), the Illinois State Board of Education requires that students must have passed all the MATH/STAT and professional education courses applicable to their major (Mathematics Education emphasis at NIU) with a grade of C or better. In addition to the course work and licensure requirements in the Department of Mathematical Sciences, students must complete other course work and licensure requirements outside the department. A minor that includes a teaching endorsement in a teaching area outside of mathematics is highly desirable to enhance placement opportunities. Students who wish to pursue the emphasis in mathematics education and to seek educator licensure should consult with an adviser in the Department of Mathematical Sciences before enrolling in ILAS 201. 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 - Axiomatic 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 - Student Teaching (Secondary) in Mathematics (7-12) (See "Clinical Experiences" below)
 MATH 420 - Abstract 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 - Abstract 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 Licensure

Apply for admission to educator licensure in the Department of Mathematical Sciences. This is usually done three semesters prior to the semester of student teaching.

Pass all areas of the Test of Academic Proficiency of the Illinois Licensure Testing System in order to be formally admitted to the educator licensure program. This should be accomplished before enrolling in ILAS 301. The Mathematics Content Area Test of the Illinois Licensure Testing System must be passed before enrolling in MATH 401 and MATH 412. Information about the test and registration for the test can be obtained from the Illinois State Board of Education.

Obtain departmental approval for admission to educator licensure. This is normally done through a conference with the coordinator of educator licensure in mathematics two semesters prior to the semester of student teaching. Departmental consent must be given in the absence of this conference.

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 400¹ - 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
 SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)
 Clinical experiences and student teaching (11-16). For Illinois licensure students must complete 130 clock hours of clinical experiences prior to student teaching. The requirement may be satisfied by completing the following sequence of courses.
 ILAS 201² - Introductory Clinical Experience (1)
 ILAS 301³ - Second Clinical Experience (2), or ILAS 300 - Discipline-Based Clinical Experiences for the Illinois Standard High School License (1-2) [usually taken in same semester as EPS 406]
 MATH 401^{3,4} - Clinical Secondary School Experience in Mathematics (1-2)
 MATH 413⁵ - 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 educator licensure requirements are the same for undergraduate mathematical sciences majors with an emphasis in mathematics education and for postbaccalaureate students seeking licensure 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 BKST 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 "Educator Licensure Requirements."

Exit Examination

Students seeking licensure must pass the Illinois Assessment of Professional Teaching Test. Information about this test may be obtained from the Illinois State Board of Education.

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 educator licensure in mathematics about admission to ILAS 201. Students are eligible to enroll in ILAS 201 after passing MATH 230 with a grade of C or better. Postbaccalaureate students should consult with the coordinator of educator licensure in mathematics upon arrival.

³ Students must consult with the coordinator of educator licensure 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 licensure.

Emphasis 6. Actuarial Science

This interdisciplinary track prepares students for careers in the actuarial profession and helps them learn material included in the Exams P / 1 (Probability), FM / 2 (Financial Mathematics) and M / 3 (Actuarial Models) of the Society of Actuaries (SOA) / Casualty Actuarial Society (CAS). A few courses relevant to Exam C / 4 (Construction and Evaluation of Actuarial Models) of the SOA / CAS are also available to actuarial students. Interested students should contact the Division of Statistics for advising in this emphasis.

Note: A student seeking to attain membership with the SOA and/or CAS is required to complete the *Validation by Educational Experience (VEE)* requirements of the societies in three areas: applied statistics, economics, and corporate finance. Although not a requirement for completion of this emphasis, a student may receive VEE credits by completing STAT 473, STAT 478, ECON 260, ECON 261, FINA 330 and FINA 340 with a grade of B or better in each course.

Requirements in Department (49-52)

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 382 - Theory of Interest and Financial Derivatives (4)
 STAT 470 - Introduction to Probability Theory (3)
 STAT 473 - Statistical Methods and Models I (3), and STAT 473A - Statistical Computing Packages (1)
 STAT 478 - Statistical Methods of Forecasting (3)
 STAT 481 - Probabilistic Foundations in Actuarial Science (3)
 Three from the following (7-10)
 STAT 483 - Stochastic Processes I (4)
 STAT 485 - Life Contingencies and Payment Models I (3)
 STAT 486 - Life Contingencies and Payment Models II (3)
 STAT 495 - Special Topics in Actuarial Science (1-3)

Requirements outside Department (25)

ACCY 288 - Fundamentals of Accounting (3)
 ACCY 306 - Financial Accounting Information for Business Decisions (3)
 CSCI 240 - Computer Programming in C++ (4)
 ECON 260 - Principles of Microeconomics (3)
 ECON 261 - Principles of Macroeconomics (3)
 FINA 320 - Principles of Finance (3)
 FINA 330 - Corporate Finance (3)
 FINA 340 - Investments (3)

Total Hours for Emphasis 6, Actuarial Science: 74-77

Special Requirement

At least 65 semester hours of the total hours required for the baccalaureate degree must be taken in courses other than those in the Department of Mathematical Sciences and the Division of Statistics.

Recommendations for Actuarial Students

The following additional courses cover some of the important topics in, and will help students who plan to take, Exam C / 4 of the SOA / CAS.

STAT 472 - Introduction to Mathematical Statistics (3)
 STAT 479 - Practice of Bayesian Statistics (3)
 STAT 491 - Programming and Computing in Statistics (3)

The skills from the following additional courses will help students after they enter the actuarial profession.

COMS 361 - Business and Professional Communication (3)
 CSCI 215 - Visual Basic (4)
 ENGL 308 - Technical Writing (3)
 GEOG 256 - Maps and Mapping (3)
 GEOG 359 - Introduction to Geographic Information Systems (3)
 STAT 474 - Statistical Methods and Models II (3)

Students should see their advisors in the Division of Statistics before scheduling these additional courses in their individual programs of study.

Degree with Honors

The Department of Mathematical Sciences offers the exceptional student an opportunity to earn a degree with honors in any of the six 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 or in the emphasis in actuarial science, 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.

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, STAT 470H-STAT 481H, STAT 481H-STAT 483H.

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)

Two courses from MATH 239 (or MATH 240), MATH 336, and STAT 350 (6-7)

At least one mathematics course numbered above MATH 419 (3)

Six or more semester hours in the minor must be taken at NIU.

Option 3. Mathematics Education (29-31)

The requirements listed below for the minor in Mathematics Education apply to students who complete the minor before the fall semester 2014. Students who anticipate completing the minor after summer 2014 should consult their advisors.

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. The Illinois State Board of Education (ISBE) requires that students must have passed all the MATH and STAT courses applicable to their minor in Mathematics Education with a grade of C or better. 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 - Axiomatic 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 - Abstract 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)

The requirements listed below for the minor in Elementary Mathematics Education apply to students who complete the minor before the fall semester 2014. Students who anticipate completing the minor after summer 2014 should consult their advisors.

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. The Illinois State Board of Education (ISBE) requires that students must have passed all the MATH and STAT courses applicable to their minor in Mathematics Education with a grade of C or better.

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 (3)

*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 (21-23)

*MATH 229 - Calculus I (4)

*MATH 230 - Calculus II (4)

MATH 232 - Calculus III (4)

Three of the following (9-11)

STAT 350 - Introduction to Probability and Statistics (3)

STAT 470 - Introduction to Probability Theory (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)

STAT 483 - Stochastic Processes I (4)

Six or more semester hours in the minor must be taken at NIU.

Minor in Actuarial Science (29)

This minor is designed to provide preparatory study in actuarial science. Specifically, students completing the required course work can take the professional Exams P/1 (Probability) and FM/2 (Financial Mathematics) of the Society of Actuaries/Casualty Actuarial Society.

MATH 229 - Calculus I (4)

MATH 230 - Calculus II (4)

MATH 232 - Calculus III (4)

MATH 240 - Linear Algebra and Applications (4)

STAT 350 - Introduction to Probability and Statistics (3)

STAT 382 - Theory of Interest and Financial Derivatives (4)

STAT 470 - Introduction to Probability Theory (3)

STAT 481 - Probabilistic Foundations in Actuarial Science (3)

Ten or more semester hours in the minor must be taken at NIU. For students who have passed the four courses FINA 330, FINA 340, FINA 350, and FINA 455, the STAT 382 requirement in the minor in actuarial science will be waived.

Certificate of Undergraduate Study**Actuarial Science (12)**

This certificate is open to all undergraduates. It is designed to provide preparatory study in actuarial science. Specifically, students completing the required course work can take the professional Exam P/1 of the Society of Actuaries (SOA)/the Casualty Actuarial Society (CAS). 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.

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)
 Please note that MATH 240 is a co-requisite for STAT 470.

Six or more semester hours in the minor must be taken at NIU.

Course List

Mathematical Sciences (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: KCMA 098 with a grade of C or better, or MATH 109 with a grade of C or better, or previous credit in MATH 110, or 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 previous credit in MATH 155, 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: MATH 110 with a grade of C or better, or previous credit in MATH 210, or satisfactory performance on the Mathematics Placement Examination.

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. Students may receive credit for both MATH 211 and MATH 229, but only one of them will count toward the minimum number of hours required for graduation. 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 previous credit in MATH 211, or satisfactory performance on the Mathematics Placement Examination.

229. CALCULUS I (4). A first course in calculus. Students may receive credit for both MATH 211 and MATH 229, but only one of them will count toward the minimum number of hours required for graduation. 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.

239. MATRICES, VECTORS AND APPLICATIONS (3). Systems of linear equations, matrix algebra, determinants, n-dimensional real vector spaces, eigenvalues and eigenvectors. Least squares problems and the singular value decompositions. Except with departmental approval students may not receive credit for both MATH 239 and MATH 240. Not used in major GPA calculation for mathematical sciences majors. PRQ: MATH 232 or consent of department.

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 (1-5). 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.

353. AXIOMATIC 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 (1-2). A discipline-based clinical experience for students seeking initial secondary licensure 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 except for mathematics education majors or minors. For those seeking or holding secondary education licensure, completion of or concurrent enrollment in ILAS 301 is strongly recommended. PRQ: For those seeking or holding elementary education licensure, MATH 229, MATH 402, and consent of the department; for those seeking or holding secondary education licensure, consent of department.

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 (7-12). Student teaching for 10 weeks or for one semester. Assignments to be arranged with the Office of Educator Licensure in the College of Liberal Arts and Sciences after approval by the Department of Mathematical Sciences. Not available for credit in the major. See "Educator Licensure Requirements." S/U grading. 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 licensure 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. ABSTRACT 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. ABSTRACT 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). 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, either MATH 239 or MATH 240, and either CSCI 230 or CSCI 240 or approved equivalent.

435. NUMERICAL ANALYSIS (3). 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, either MATH 239 or MATH 240, and either CSCI 230 or 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. APPLIED MATHEMATICS FOR SCIENCES AND ENGINEERING (3). Designed mainly for science and engineering majors. Topics include the formulation of the basic partial differential equations from engineering and classical physics, separation of variables for the wave, heat, and Laplace equations, Fourier series and Sturm-Liouville theory, applications of Laplace and Fourier transform techniques to partial differential equation problems, eigenfunction expansions, method of characteristics, perturbation methods, Green's functions, orthogonal expansions, and numerical methods. PRQ: MATH 232 and MATH 336.

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). Theory of partial differential equations emphasizes the basic nature of solutions of hyperbolic, parabolic, and elliptic equations as represented, respectively, by the wave, heat, and Laplace equations. Solution techniques covered include the method of characteristics, separation of variables, generalized eigenfunction expansions, and the Fourier integral and transform. Theoretical approaches are presented for the following topics: convergence and uniform convergence of Fourier series, Bessel's inequality, Green's identities, Sturm-Liouville theory, uniqueness of solutions, existence of fundamental solutions, and the maximum principle. PRQ: MATH 232, MATH 240, and MATH 336.

444. LINEAR PROGRAMMING AND NETWORK FLOWS (3). Introduction to linear programming, network flows, and applications. PRQ: MATH 239 or 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 239, or 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 CSC/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 (1-6).

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 (1-3). 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 in modern society. Topics include data collection, descriptive statistics, graphical displays of data, the normal distribution, elementary probability, elements of statistical inference, estimation and hypothesis testing, and linear regression. 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.

382. THEORY OF INTEREST AND FINANCIAL DERIVATIVES (4). Learning outcomes of the Exam FM / 2 of the Society of Actuaries / the Casualty Actuarial Society, including rates of interest, present and future values, annuities-certain, perpetuities, stocks, bonds, mutual funds and guaranteed investment contracts. Key techniques in financial mathematics including discounting, accumulation, amortization, and yield rate determination. Modern financial concepts including yield curves, spot and forward rates, duration, convexity, and immunization. Introduction to financial derivatives, forwards, options, futures, swaps, and the principle of no arbitrage. Practice in solving typical problems encountered in the above-mentioned actuarial examinations. PRQ: MATH 230 or consent of division.

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 STAT 350, or consent of division. CRQ: MATH 240 or consent of division.

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.

479. PRACTICE OF BAYESIAN STATISTICS (3). Introduction to Bayesian data analysis and applications with appropriate software. Topics include Bayes Theorem, discrete and continuous single-parameter models, comparison of Bayesian and non-Bayesian inference, multi-parameter and hierarchical models, Bayesian computation including Markov chain simulation, mixture models, Bayesian sample-size determination and applications to modeling data from a wide variety of areas in business, engineering and science. PRQ: STAT 350 and 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, and in-depth study of conditioning, for multivariate distributions. Basic theory of individual and collective risk models for aggregate loss from insurance policies. PRQ: STAT 470 or consent of division.

483. STOCHASTIC PROCESSES I (4). Review of probabilistic tools including conditioning for joint distributions. Random sums. Finite-dimensional properties of discrete-time Markov chains. Homogeneous, and non-homogeneous, Poisson and compound Poisson processes. Thinning and summing of independent Poisson processes. Brownian motion processes. Introduction to the SDE and Ito's lemma. PRQ: STAT 470 or consent of division.

484. FINANCIAL DERIVATIVES FOR ACTUARIES (3). *Crosslisted with ECON 484X*. Review of financial derivatives including futures, European and American options and exotic options. Greeks, trading and hedging strategies. Pricing derivative securities with appropriate boundary conditions, including the Black-Scholes formula, binomial trees, lattice models and finite difference methods. Simulation and variance reduction techniques. Interest rate models. Covers the learning outcomes regarding financial models in the exam MFE of the Society of Actuaries (SOA), which is also the Exam 3F of the Casualty Actuarial Society (CAS). PRQ: STAT 483 or consent of division.

485. LIFE CONTINGENCIES AND PAYMENT MODELS I (3). Survival-time distributions, and their curtate versions, for one or two lives, possibly dependent, truncated or censored. Mortality tables, aggregate, select and ultimate, and their use in modeling continuous life-time data. Present-value-of-benefit distributions for life insurances and annuities in the single and multiple-decrement models. PRQ: STAT 382 and STAT 470, or consent of division.

486. LIFE CONTINGENCIES AND PAYMENT MODELS II (3). Premium calculations for life insurances and annuities via percentiles and the equivalence principle. Liability calculations for life insurances and annuities via the prospective, retrospective methods. Calculation of reserves for fully-discrete life insurances. Discuss the above for single and multiple-decrement models. Extend the present-value-of-benefit, present-value-of-loss-at-issue, present-value-of-future-loss random variables and liabilities to discrete-time Markov Chain models. PRQ: STAT 485, or consent of division.

491. PROGRAMMING AND COMPUTING IN STATISTICS (3). A study of algorithms useful for implementing computer intensive techniques in statistical inference and probability. Topics include computation of maximum likelihood estimators, bootstrap approximation, randomization and permutation testing techniques, Bayesian techniques, approximation of distribution functions and quantiles, simulation of random variables and stochastic processes. Implementation of the algorithms is achieved using the C++ (or C or FORTRAN) and R programming languages, as well as other specialized statistical computation software. PRQ: STAT 472 and either CSCI 230 or CSCI 240, or consent of division.

493. SPECIAL TOPICS IN STATISTICS (1-3). 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.

495. SPECIAL TOPICS IN ACTUARIAL SCIENCE (1-3). Discussion and study of readings on topics of special interest to undergraduate actuarial students, including preparation for actuarial examinations. May be repeated to a maximum of 6 semester hours. PRQ: Consent of division.

Mathematical Sciences Faculty

Bernard Harris, Ph.D., University of Wales, professor, chair
 John Wolfskill, Ph.D., California Institute of Technology, associate professor, assistant chair
 Gregory Ammar, Ph.D., Case Western Reserve University, professor
 Sanjib Basu, Ph.D., Purdue University, professor
 John A. Beachy, Ph.D., Indiana University, Distinguished Teaching Professor
 Hamid Bellout, Ph.D., Purdue University, professor
 James Benson, Ph.D., University of Missouri, assistant professor
 William D. Blair, Ph.D., University of Maryland, Distinguished Teaching Professor
 Harvey I. Blau, Ph.D., Yale University, Presidential Teaching Professor
 Richard Blecksmith, Ph.D., University of Arizona, professor
 Frederick Bloom, Ph.D., Cornell University, Distinguished Research Professor
 Douglas Bowman, Ph.D., University of California, Los Angeles, professor
 Biswa N. Datta, Ph.D., University of Ottawa, Distinguished Research Professor
 Paul Dawkins, Ph.D., University of Texas at Arlington, assistant professor
 Sien Deng, Ph.D., University of Washington, professor
 Nader Ebrahimi, Ph.D., Iowa State University, Distinguished Research Professor
 Alastair Fletcher, Ph.D., University of Warwick, associate professor
 Michael Geline, Ph.D., University of Chicago, assistant professor

Daniel Grubb, Ph.D., Kansas State 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
 Helen A. Khoury, Ph.D., Florida State University, associate professor
 Qingkai Kong, Ph.D., University of Alberta, professor
 Ilya Krishtal, Ph.D., Voronezh State University, associate 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
 Maya Mincheva, Ph.D., University of Waterloo, assistant professor
 Deepak Naidu, Ph.D., University of New Hampshire, assistant professor
 Alan Polansky, Ph.D., Southern Methodist University, associate professor
 Alon Regev, Ph.D., University of California, San Diego, assistant professor
 Mary Shafer, Ph.D., University of Wisconsin, associate professor
 Peng Shi, Ph.D., University of Wisconsin, assistant professor
 Gleb Sirotkin, Ph.D., Indiana University/Purdue University, Indianapolis, associate professor
 Linda R. Sons, Ph.D., Cornell University, Distinguished Teaching Professor
 Joseph B. Stephen, Ph.D., University of Nebraska, Lincoln, associate professor
 Jeffrey L. Thunder, Ph.D., University of Colorado, 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

The Center for Non-Governmental Organization Leadership and Development (NGOLD) (CLCE)

The Center for Non-Governmental Organization Leadership and Development (NGOLD) is an interdisciplinary, faculty-governed center that engages in a range of activities that support leadership and development of domestic and international non-governmental organizations (NGOs), with a particular focus on regional and global NGOs that are headquartered in northern Illinois. Faculty, staff, and students work with the NGO sector in research, education and training, and engagement to promote the professionalization of NGO management and to increase their capacities to provide services to their clients. Faculty from throughout the university participate in its activities.

The Center for Non-Governmental Organization Leadership and Development offers both a B.A. and a B.S. degree for a major in community leadership and civic engagement that is designed primarily for students seeking a career in public affairs in government, voluntary social agencies, and public interest groups. Each student must complete the required courses of the major along with an emphasis field. Several university departments participate in the major in community leadership and civic engagement.

Major in Community Leadership and Civic Engagement (B.A. or B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Center (18)

- CLCE 100 - Community Leadership and Civic Engagement (3)
- CLCE 350 - Community Organizations in a Digital World (3),
OR CLCE 390 - Special Topics in Community Leadership and Civic Engagement (3)
- CLCE 410 - Nonprofits and Community Engagement (3)
- CLCE 429/ANTH 429X/SOCI 329X - International NGOs and Globalization (3)
- CLCE 495 - Capstone Seminar in Community Leadership and Civic Engagement (3)
- Research course with permission of center (3)

Requirements outside center (B.A., 36-48; B.S., 46-51)

- ANTH 220 - Introduction to Cultural Anthropology (3),
OR ECON 160 - Contemporary Economic Issues (3),
OR HIST 171 - World History II: Problems in the Human Past (3),
OR PHIL 231 - Contemporary Moral Issues (3),
OR POLS 260 - Introduction to Comparative Politics (3),
OR SOCI 170 - Introduction to Sociology (3),
OR SOCI 270 - Social Problems (3)
- ANTH 329 - Anthropology and Contemporary World Problems (3)
- POLS 100 - American Government and Politics (3)
- PSPA 326X/POLS 326 - Nonprofit Management (3)
- PSPA 301 - Philanthropy and Volunteerism (3)
- PSPA 402 - Resource Strategies for Non-Profit Organizations (3),
OR MGMT 402X - Resource Strategies for Non-profit Organizations (3)
- SOCI 392 - Organizing for Social Action (3)

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.")

Emphasis 1. Advocacy

Requirements outside Center (15)

- Five of the following, from at least three different departments (15)
- COMS 220 - Rhetoric and Public Issues (3)
- COMS 300 - Speech Writing (3)
- COMS 302 - Introduction to Organizational Communication Theory (3)
- COMS 305 - Argumentation and Debate (3)
- COMS 401 - Criticism of Public Rhetoric (3)
- COMS 403 - Freedom of Speech and Communication Ethics (3)
- COMS 470 - Campaign Strategies and Development (3)
- JOUR 401 - Editorial and Opinion Writing (3)
- POLS 220 - Introduction to Public Policy (3)
- PSPA 201 - Public Service Leadership (3)
- PSPA 330X - Bureaucracy and the Public Policy Process (3),
OR POLS 330 - Bureaucracy and the Public Policy Process (3)
- PSPA 331X - Introduction to Public Administration (3),
OR POLS 331 - Introduction to Public Administration (3)
- SOCI 375 - Sociology of Organizations (3)
- SOCI 379 - Collective Behavior and Social Movements (3)
- SOCI 386 - Peace and Social Justice (3)

Emphasis 2. Arts and Humanities

Requirements outside Center (15)

- Five of the following, from at least three different departments
- ANTH 462 - Museum Methods (3)
- ART 457 - Museum Education (3)
- ART 465 - Introduction to Museum Studies (3)
- HIST 352 - Popular Culture in Japan (3)
- HIST 383 - Latin America through Film (3)
- HIST 390 - Film and History (3)
- MUHL 326 - Survey of World Music (3)
- MUHL 431 - Music of Southeast Asia (3)
- MUHL 432 - Music of China (3)
- PSPA 201 - Public Service Leadership (3)
- THEA 203 - Introduction to Theatre (3)
- THEA 370 - History of Theatre and Drama I (3)
- THEA 371 - History of Theatre and Drama II (3)
- THEA 475 - Contemporary Theatre (3)
- THEA 480 - Studies in American Theatre History (3)

Emphasis 3. Enterprise

Requirements outside Center (15)

- Five of the following, from at least three different departments (15)
- ACCY 288 - Introduction to Fundamentals of Accounting (3)
- ECON 260 - Principles of Microeconomics (3)
- ECON 261 - Principles of Macroeconomics (3)
- ECON 330 - International Economics (3)
- ECON 385 - Introduction to Urban and Regional Economics (3)
- HIST 354 - Black American Business and Entrepreneurship (3)
- HIST 486 - Poverty and Progress in Latin America (3)
- MGMT 217 - Legal Environment of Business (3)
- MGMT 311 - Social Entrepreneurship (3)
- MGMT 333 - Principles of Management (3)
- MKTG 310 - Principles of Marketing (3)
- PSPA 201 - Public Service Leadership (3)

Emphasis 4. Environmental**Requirements outside Center (15)**

Five of the following, from at least three different departments (15)

- ANTH 425 - Environment and Anthropology (3)
- ANTH 464/CLCE 464X - Disasters without Borders (3)
- ECON 260 - Principles of Microeconomics (3)
- ECON 261 - Principles of Macroeconomics (3)
- ECON 386 - Environmental Economics (3)
- GEOG 253 - Environment and Society (3)
- ENVS 301 - Environmental Science I: Physical Systems (3)
- ENVS 302 - Environmental Science II: Biological Systems (3)
- ENVS 303 - Environment in the Social Sciences and Humanities (3)
- ENVS 304 - Environmental Law, Policy, and Economics (3)
- ENVS 305X - Green Technology Technologies (3)
- HIST 377 - American Environmental History (3)
- JOUR 350 - Environment, Health, and Media (3)
- PSPA 201 - Environmental Sociology (3)
- SOCI 364 - Environmental Sociology (3)

Emphasis 5. Global**Requirements outside center (15)**

Five of the following, from at least three different departments (15)

- ANTH 363 - Globalization and Corporate Cultures (3)
- ANTH 426 - Political Anthropology (3)
- ANTH 427 - Economic Anthropology (3)
- ANTH 464/CLCE 464X - Disasters without Borders (3)
- ANTH 467 - Applied Anthropology (3)
- COMS 362 - Intercultural Communications (3)
- COMS 454 - Transnational Communication and Media (3)
- ECON 260 - Principles of Microeconomics (3)
- ECON 261 - Principles of Macroeconomics (3)
- ECON 330 - International Economics (3)
- GEOG 202 - World Regional Geography (3)
- JOUR 482 - International News Communications (3)
- JOUR 490 - Ethnic Minorities and the News Media (3)
- MKTG 367 - Principles of Global Marketing (3)
- POLS 386 - Global Terrorism (3)
- PSPA 201 - Public Service Leadership (3)
- PSPA 328 - Role of Nongovernmental Organizations in Development (3)
- SOCI 457 - Families in a Global Perspective (3)

Total Hours for a Major in Community Leadership and Civic Engagement: 54-66 (B.A.) OR 64-69 (B.S.)

Minor in Community Leadership and Civic Engagement (18)**Requirements in center (6)**

- CLCE 100 - Community Leadership and Civic Engagement (3)
- CLCE 350 - Community Organizations in a Digital World (3),
OR CLCE 390 - Special Topics in Community Leadership and Civic Engagement (3),
OR CLCE 429 - International NGOs and Globalization (3)

Requirements outside center (12)

- PSPA 326X - Nonprofit Management (3),
OR POLS 326 - Nonprofit Management (3)
- Three of the following from different departments (9)
- ANTH 329 - Anthropology and Contemporary World Problems (3)
- ANTH 429X - International NGOs and Globalization (3)
- ANTH 464 - Disasters without Borders (3),
OR CLCE 464X - Disasters without Borders (3)
- CLCE 350 - Community Organizations in a Digital World (3)
- CLCE 390 - Special Topics in Community Leadership and Civic Engagement (3)
- CLCE 429 - International NGOs and Globalization (3)
- MGMT 217 - Legal Environment of Business (3)
- MGMT 311 - Social Entrepreneurship (3)
- PSPA 201 - Public Service Leadership (3)

- PSPA 301 - Philanthropy and Volunteerism (3)
- PSPA 326X - Nonprofit Management (3),
OR POLS 326 - Nonprofit Management (3)
- PSPA 328 - Nongovernmental Organizations and Development (3)
- PSPA 402 - Resource Strategies for Nonprofit Organizations (3),
OR MGMT 402X - Resource Strategies for Nonprofit Organizations (3)
- SOCI 329 - International NGOs and Globalization (3)
- SOCI 375 - Sociology of Organizations (3)
- SOCI 392 - Organizing for Social Action (3)

Certificate of Undergraduate Study**Civic Engagement (12)**

Coordinator: Nancy Castle (Director)

The Certificate of Undergraduate Study in Civic Engagement is a pre-professional curriculum which will provide the student with a credential and solid foundation for public service oriented work. It is a good preparation for those who are seeking to work in a variety of technical or professional fields with nonprofits and government. Through its course work the certificate provides an understanding of the interrelationships among the nonprofit, private, and governmental sectors as well as the policies, regulatory framework, and practical considerations that govern them. Students will develop project analysis and public presentation skills. The aim of the certificate is to provide a bridge between theory and practical application.

The certificate consists of three core courses and a choice of an elective from one of eight related areas. The core courses focus on fundamental strategies for civic engagement and effective citizenship and on various models for the solution of social problems through nonprofits, social enterprises, and other vehicles of civic engagement. The core courses enable practical application of knowledge and provide engaged learning opportunities.

The certificate is open to all students admitted to degree and non-degree study at Northern Illinois University. Students must maintain good academic standing within the university and achieve a minimum grade of C in each course. The certificate courses may also be applied to satisfy requirements for B.A. and B.S. degrees.

Required Courses (12)

- CLCE 100 - Community Leadership and Civic Engagement (3)
- ANTH 329 - Anthropology and Contemporary World Problems (3),
OR SOCI 392 - Organizing for Social Action (3)
- PSPA 301 - Philanthropy and Volunteerism (3)
- One course from the following (3)
- MGMT 311 - Social Entrepreneurship (3)
- MKTG 310 - Principles of Marketing (3)
- POLS 220 - Introduction to Public Policy (3)
- PSPA 326 - Nonprofit Management (3)
- PSPA 328 - Role of Nongovernmental Organizations in Development (3)
- PSPA 402 - Resource Strategies for Nonprofit Organizations (3)
- SOCI 392 - Organizing for Social Action (3)

Course List (CLCE)

100. COMMUNITY LEADERSHIP AND CIVIC ENGAGEMENT (3). Introduction to community leadership and civic engagement including avenues for making contributions to community and society. Emphasis placed on nonprofit organizations, public service, volunteering, activism, and philanthropy, locally and globally.

350. COMMUNITY ORGANIZATIONS IN A DIGITAL WORLD (3). Examines digital and online efforts of community organizations to build community leadership and civic engagement. Focus on how technological applications may provide more effective and efficient pathways for community organizations to communicate with their stakeholders and reach their strategic goals including the use of social media.

390. SPECIAL TOPICS IN COMMUNITY LEADERSHIP AND CIVIC ENGAGEMENT (3). Intensive study of a major theory, issue or movement in community leadership and civic engagement. May be repeated provided no repetition in topics occurs. For community leadership and civic engagement majors, no more than 6 credits will count for the major.

410. NONPROFITS AND COMMUNITY ENGAGEMENT (3). Provides practical and theoretical understanding of nonprofit sector and its role in addressing community challenges. Application of public service and community leadership concepts via service learning projects with community agency partners. PRQ: CLCE majors only; at least junior standing; CLCE 100 or PSPA 301; or permission of center.

429. INTERNATIONAL NGOS AND GLOBALIZATION (3). *Crosslisted with ANTH 429X and SOCI 329X.* Review of the history of international nongovernmental organizations (INGOs) particularly changes since the advent of neoliberal globalization beginning in the late 1980s that heralded an "NGO boom." Examination of the political roles of INGOs and challenges negotiating multiple relationships with communities, governments, and social movements. PRQ: Junior standing or consent of instructor.

464X. DISASTERS WITHOUT BORDERS (3). *Crosslisted as ANTH 464.* Social construction of disasters with an emphasis on the disaster response and forces that contribute to the vulnerability of a community, nation, or region. Covers social policy, humanitarian aid, media coverage and a range of local, national, or global forces such as inequality, land tenure, social exclusion, and mass urbanization.

490. CIVIC ENGAGEMENT INTERNSHIP (1-3). Supervised internship in civic engagement via placement in a community setting. Writing assignments and reflection activities required. Open to CLCE majors only. May be taken up to 6 credits. S/U grading. PRQ: CLCE 100 and consent of center.

495. CAPSTONE SEMINAR IN COMMUNITY LEADERSHIP AND CIVIC ENGAGEMENT (3). Intensive case study, research paper or other scholarly work in community leadership and civic engagement. Includes regular meetings and a formal presentation of results at completion. Serves as final capstone project in the CLCE major. PRQ: CLCE majors only. CRQ: CLCE 410.

498. INDEPENDENT STUDY IN COMMUNITY LEADERSHIP AND CIVIC ENGAGEMENT (1-3). Special readings and/or research projects in community leadership and civic engagement. May be repeated to a maximum of 6 semester hours. PRQ: Consent of center.

Community Leadership and Civic Engagement Faculty

Nancy M. Castle, Ph.D., Northern Illinois University, professor, acting director

Laura Heideman, Ph.D., University of Wisconsin, assistant professor

Alicia Schatterman, Ph.D., Rutgers University, assistant professor

Mark Schuller, Ph.D., University of California, assistant professor

Department of Philosophy (PHIL)

The Department of Philosophy offers a major leading to the B.A. or B.S. 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. or B.S.)

At least seven (7) semester hours of 400-level course work in philosophy is required to complete the major.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (34)

PHIL 205 - Symbolic Logic (3),
 PHIL 301 - Junior Writing Seminar (3), with a grade of C or better
 PHIL 321 - Ancient Philosophy (3)
 PHIL 322 - Modern Philosophy (3)
 PHIL 495 - Senior Capstone (1)

Electives in philosophy (15), no more than nine (9) hours of which may be at the 100 or 200 level.

One course from each of the following two fields (6)

Ethics and political philosophy

PHIL 331 - Classical Ethical Theories (3)
 PHIL 351 - Social and Political Philosophy (3)
 PHIL 430 - Topics in Ethics (3)
 PHIL 450 - Topics in Social and Political Philosophy (3)

Metaphysics and epistemology

PHIL 311 - Knowledge and Justification (3)
 PHIL 312 - Introduction to Metaphysics (3)
 PHIL 410 - Topics in Metaphysics or Epistemology (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

Laboratory science/mathematical/computational skills sequence (10-15)

(See "College Requirement for the B.S. Degree")

**Total Hours for a Major in Philosophy: 33-45 (B.A.)
 or 43-48 (B.S.)**

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). Investigation of enduring and fundamental questions about ourselves, the world, and our place in the world, such as: What am I? Do I have a mind or soul that is somehow separate from my body? How should I live? Do I have free will? Does God exist? What is knowledge? What is truth? What is beauty?.

105. LOGIC AND CRITICAL REASONING (3). Introduction to basic principles of rational argument evaluation in everyday life. Topics include deductive reasoning, the logic of truth functions and categorical statements, informal fallacies, inductive reasoning, causal inference, 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.

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.

301. JUNIOR WRITING SEMINAR (3). Study of one major philosophical problem in a seminar setting. Includes intensive instruction in writing in the discipline, which aims to develop skill in presenting and critically evaluating arguments. PRQ: Philosophy major and consent of department.

311. KNOWLEDGE AND JUSTIFICATION (3). Introduction to epistemology, addressing such questions as: What is knowledge? What is justified belief? How are the two related? What is evidence, and how should it inform our beliefs? What are the scope and limits of human knowledge? Can we know anything at all? If so, how should we respond to skeptical arguments intended to show that we cannot?.

312. INTRODUCTION TO METAPHYSICS (3). Introduction to philosophical problems about the nature of reality, addressing such questions as: Do human beings possess immaterial minds, or are they purely physical beings? Do human beings have free will? Is everything fated to occur exactly as it does? What is it for one event to cause another? Does anything ever happen by chance? Are wholes anything more than the sum of their parts? What are the fundamental constituents of reality?

321. ANCIENT PHILOSOPHY (3). Examination of selected writings in Ancient Philosophy, drawing especially on the work of the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans, and the Skeptics.

322. MODERN PHILOSOPHY (3). Examination of selected writings of major philosophers from the 16th to the 18th Century, drawing especially on the work of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

331. ETHICS (3). Introduction to philosophical ethics focusing on theories of morality and virtue and addressing such questions as the following: Are there objective moral truths? If so, how can we know them? How can we evaluate competing moral theories? Why should we be moral?

334. ANIMAL ETHICS (3). Examination of ethical issues concerning animals, addressing such questions as: Is it wrong to kill animals for fun? Is it wrong to wear animals? Is vegetarianism morally obligatory for people living in modern societies? Is it wrong to display animals in zoos? Is animal experimentation morally permissible?

335. ENVIRONMENTAL ETHICS (3). Examination of ethical issues involving human interaction with the environment, addressing such questions as: Why should we preserve natural environments and protect biodiversity? Are some attitudes towards the environment morally preferable to others? How should we respond to global environmental challenges, such as population growth and climate change?

336. BIOMEDICAL ETHICS (3). Examination of ethical issues in health care, addressing such questions as: Is it ever appropriate for doctors to help patients die? Should there be limits on genetic manipulation or cloning? Should society provide health care for its citizens? What guidelines should govern animal and human medical research? Should doctors ever deceive patients to protect them from harm? Under what conditions is consent to medical treatment valid?

337. BUSINESS ETHICS (3). Investigation of moral and ethical issues that arise in the context of business practices, addressing questions such as: To what extent should considerations other than profits determine business decisions? Who should be held responsible when corporations act immorally or break the law? What rights and obligations do employees and employers have with respect to one another? What obligations, if any, do businesses have to their consumers or to the general public?

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.

351. SOCIAL AND POLITICAL PHILOSOPHY (3). Introduction to some of the central debates in social and political philosophy, addressing such questions as: What, if anything, justifies state authority? Should the state attempt to promote equality among its citizens? Do rights of individuals or minority groups restrict the legitimate activity of the state? Can the welfare state be justified? What standards of justice ought to govern interactions between states?

353. PHILOSOPHY OF LAW (3). Survey of philosophical problems in the law, addressing such questions as: What is the relationship between law and morality? What makes a particular law valid or authoritative? What sorts of behavior can the state legitimately regulate? What standards should judges use when interpreting or applying the law? What, if anything, justifies punishing those who break the law, and what forms of punishment are most appropriate?

355. FEMINISM AND PHILOSOPHY (3). Introduction to feminist challenges to traditional philosophy, addressing such questions as: Do women approach philosophical problems differently than men? What, if anything, is the philosophical significance of the centuries-long exclusion of women from philosophical scholarship? Do women bring a unique perspective to philosophical questions? What difference can women make to the practice of philosophy?

360. PHILOSOPHY OF SCIENCE (3). Introduction to the philosophy of science, addressing such questions as: What are the methods distinctive of science? Are scientific methods more likely to lead to true theories than, say, crystal-ball-gazing? When scientists choose between rival theories, is the choice wholly rational or partly a matter of subjective taste? Are our best scientific theories approximately true descriptions of reality or merely instruments for making predictions?

363. PHILOSOPHY OF MIND (3). Introduction to philosophical problems about the mind, addressing such questions as: What is the relation between the mind and the brain? Is the mind-brain relation perhaps incomprehensible by the human mind? What can neuroscience and psychology tell us about the nature of mind? Is there a subjective quality to our experience that cannot be explained by objective scientific theories? Designed for students interested in psychology and cognitive science as well as for students interested in philosophy.

370. PHILOSOPHY OF RELIGION (3). Philosophical examination of religion, addressing such questions as: Does God exist? Is the world's order and regularity a reason to think so? Is the amount and variety of evil in the world a reason to think not? What is religion? Can it be reconciled with science? Are faith and reason compatible?

380. 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.

385. PHILOSOPHY AND SCIENCE FICTION (3). Examination of philosophical problems raised in science fiction literature and films, addressing such questions as: Are parallel universes real? Is time travel possible? How can you know that the world of your experience is not a computer simulation? Do androids have conscious experience? Do you retain your identity through teleportation?

390. TOPICS IN PHILOSOPHY (3). Study of one major philosophical problem, position, or movement. May be repeated to a maximum of 6 semester hours provided no repetition of subject matter occurs.

402. PHILOSOPHY OF LOGIC (3). Consideration of various philosophical issues concerning logic and its applications, for example, the nature of validity, theories of truth, paradoxes of reasoning, and classical versus non-standard logics. PRQ: PHIL 205 or consent of department.

403. PHILOSOPHY OF MATHEMATICS (3). Study of the nature of mathematics based on a philosophical examination of its fundamental subject-matter, concepts and methods. PRQ: 6 semester hours of philosophy at the 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 may include meaning, communication, reference, logical form, modalities, tenses, metaphor, indexical terms, indirect discourse, anaphora, theories of truth, and semantic paradoxes. PRQ: PHIL 205 and 3 semester hours of philosophy at the 300 level or consent of department.

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.

406. ADVANCED LOGIC (3). Topics selected from major results of metalogic, including basic proof theory and model theory, soundness, completeness, the Löwenheim-Skolem theorem, computability, Gödel's incompleteness theorem, and Church's theorem. PRQ: PHIL 405 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 provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

420. TOPICS IN THE HISTORY OF PHILOSOPHY (3). May be repeated to a maximum of 6 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

421. MAJOR PHILOSOPHERS (3). Intensive study of a single figure in the history of philosophy such as Plato, Aristotle, Hume, or Kant. May be repeated to a maximum of 6 semester hours provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level 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.

426. AMERICAN PHILOSOPHY (3). Study of some of the major traditions and thinkers in American philosophy. Readings may include selections from Edwards, Jefferson, Emerson, Peirce, James, Royce, Dewey, and more recent figures. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

427. 19TH CENTURY PHILOSOPHY (3). Examination of selected writings by 19th century philosophers, such as Hegel, Schopenhauer, Marx, Kierkegaard, Mill, and Nietzsche. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

428. 20TH CENTURY PHENOMENOLOGY (3). Examination of selected writings by philosophers in the phenomenological tradition, such as Husserl, Heidegger, Sartre, and Merleau-Ponty. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

429. 20TH CENTURY ANALYTIC PHILOSOPHY (3). Examination of selected writings by philosophers in the analytic tradition, such as Moore, Russell, Wittgenstein, Carnap, Ryle, and Quine. PRQ: 6 semester hours of philosophy at the 300 level including PHIL 322 or consent of department.

430. TOPICS IN ETHICS (3). Intensive study of a major theory, issue, or movement in ethics. May be repeated to a maximum of 6 semester hours toward any one degree provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

450. TOPICS IN SOCIAL AND POLITICAL PHILOSOPHY (3). Intensive study of a major theory, issue, or movement in social and political philosophy. May be repeated to a maximum of 6 semester hours provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

461. METAPHYSICS OF SCIENCE (3). Examination of ontological issues within the sciences. Topics may include properties and other ontological categories, reduction and emergence, laws of nature, essentialism, and realism. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

464. PHILOSOPHY OF PHYSICS (3). Survey of philosophical problems specific to physics. Topics may include the nature of space and time in relativity theories; probability and irreversibility in thermodynamics and statistical mechanics; locality, causality, and objectivity in quantum theory; ontology, and attitudes toward infinities in quantum field theory. Presupposes neither technical knowledge of physical theories nor advanced competence in mathematics. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

470. TOPICS IN PHILOSOPHY OF RELIGION (3). Detailed analysis of one or more key issues in contemporary analytic philosophy of religion, or in important recent theories of the nature and function of religion. May be repeated to a maximum of 6 semester hours provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

490. TOPICS IN PHILOSOPHY (3). Intensive study of one major philosophical problem or position. May be repeated to a maximum of 9 semester hours provided no repetition of subject matter occurs. PRQ: 6 semester hours of philosophy at the 300 level or consent of department.

491. DIRECTED READINGS (1-4). 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.

495. SENIOR CAPSTONE (1). Completion of additional advanced work, including a substantial philosophical essay, in a concurrent 400-level course of the student's choice. PRQ: Philosophy major, senior standing, PHIL 301 with a grade of C or better, and consent of department. CRQ: A 400-level philosophy course other than PHIL 405 and PHIL 406.

Philosophy Faculty

David J. Buller, Ph.D., Northwestern University, Distinguished Research Professor, chair

Valia Allori, Ph.D., Rutgers University, associate professor

Lenny Clapp, Ph.D., Massachusetts Institute of Technology, assistant professor

Steven Daskal, Ph.D., University of Michigan, associate professor

Mylan Engel, Jr., Ph.D., University of Arizona, professor

Alicia Finch, Ph.D., University of Notre Dame, associate professor

Carl Gillett, Ph.D., Rutgers University, professor

Jason Hanna, Ph.D., University of Colorado at Boulder, assistant professor

Geoff Pynn, Ph.D., Yale University, assistant 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 educator licensure is available through the physics educator licensure 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 educator licensure program only if they also wish to become licensed to teach within the state of Illinois. Students seeking a degree in physics who also wish to become licensed 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 licensure requirements in four years.

The department provides academic advisement to incoming pre engineering 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Professional Physics for Graduate Study

Requirements in Department (45-50)

PHYS 253 - Fundamentals of Physics I: Mechanics (4), and PHYS 273 - Fundamentals of Physics II: Electromagnetism (4)
 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 383 - Intermediate Quantum Physics (3)
 PHYS 430 - Optics (4),
 OR PHYS 475 - Laboratory Electronics II (4)
 PHYS 460 - Quantum Physics (3)
 PHYS 498 - Senior Seminar (1),
 OR PHYS 499H - Senior Project in Physics (3)

Two of the following¹ (6)

PHYS 400¹ - Analytical Mechanics II (3)
 PHYS 461 - Modern Physics (3)
 PHYS 463 - Thermodynamics, Kinetic Theory, and Statistical Mechanics (3)
 PHYS 470¹ - Electricity and Magnetism II (3)
 PHYS 485 - Methods of Mathematical Physics II (3)

Requirements outside Department (23)

*CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - 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

Important: Students wishing to receive Illinois State licensure and/or endorsement to teach physics should also refer carefully to the section below labeled Educator Licensure for additional requirements.

Requirements in Department (37-39)

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)
 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 383 - Intermediate Quantum Physics (3)
 PHYS 493X - Interdisciplinary Teaching of Science in Secondary Education (3)
 PHYS 495 - Teaching of Physical Sciences (3)
 PHYS 498 - Senior Seminar (1),
 OR PHYS 499H - Senior Project in Physics (3)

Requirements outside Department (23)

*CHEM 210 - General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - General Chemistry II (3), and *CHEM 213 - General Chemistry Laboratory II (1)
 *MATH 229 - Calculus I (4), and MATH 230 - Calculus II (4), and MATH 232 - Calculus III (4)
 MATH 336 - Ordinary Differential Equations (3)

Total Hours for Emphasis 2, Secondary School Teaching: 60-62

Emphasis 3. Applied Physics

Requirements in Department (32-34)

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)
 PHYS 383 - Intermediate Quantum Physics (3)
 PHYS 284 - Quantum Physics Laboratory (1)
 PHYS 300 - Analytical Mechanics I (3)

* Available for general education credit.

¹ PHYS 400 and PHYS 470 are recommended for students intending to enter graduate school in physics.

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 383 - Intermediate Quantum Physics (3)
 PHYS 498 - Senior Seminar (1),
 OR PHYS 499H - Senior Project in Physics (3)

Requirements outside Department (23)

*CHEM 210 General Chemistry I (3), and *CHEM 212 - General Chemistry Laboratory I (1)
 *CHEM 211 - General Chemistry II (3), *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 (14-16)

Electives from physics and other related sciences. At least 7 semester hours must be 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: 69-73

Educator Licensure Program

Individuals wishing to receive licensure and/or endorsement to teach physics should consult with the departmental licensure coordinator as soon as possible and also refer to the "Teacher Certification Requirements" section of the NIU catalog. Admission to educator licensure in the Department of Physics may take place at any time once the student is enrolled at NIU. An application should be made in writing to the certification 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.

Please note: Graduate students and students who already possess the baccalaureate or higher degree and wish to pursue licensure 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 licensure students should seek advising as soon after enrollment as possible.

Admission

The student must establish a file with the departmental licensure coordinator and complete satisfactory reviews of progress each semester after establishment of the file. The student must have completed at least PHYS 253 and PHYS 273, and MATH 229, or their equivalents as determined by the coordinator. The student must be enrolled in a degree program leading to a degree appropriate to licensure being pursued or be in possession of an appropriate degree from an accredited institution. The student must have completed 6 semester hours of written communication and 3 semester hours of oral communication with grades of C or better. The student must have a minimum GPA of 2.50 in all undergraduate course work. The student must have passed the ICTS Test of Academic Proficiency. The student must also have a satisfactory interview with the departmental licensure coordinator in which the student demonstrates attitudes and motivations appropriate to the professional educator.

Requirements

The program of courses the student chooses for meeting licensure requirements must be approved by the departmental licensure coordinator 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 moved from a course-based set of requirements for certification to course and standards-based requirements. Approved licensure 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 licensure program requirements are designed to prepare candidates for licensure 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 Test of Academic Proficiency, the ICTS Assessment of Professional Teaching Test, the secondary certificate subject matter examinations of the Illinois Licensure Testing System and demonstration that the candidate has met teaching standards for the physics teacher. Contact the department licensure coordinator for information on the necessary criteria that experiences must meet to be used to meet licensure requirements.

Outlined below is the required course work as determined and approved by the licensure coordinators to meet state standards for the preparation of teachers, certification requirements and student needs. It is strongly recommended that students completing requirements for the teaching license in physics also obtain an endorsement in at least one subject other than physics.

Please note: The following classes for educator licensure may change to reflect new state requirements.

EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3)
 ETT 402 - Teaching and Learning with Technology (3)
 ILAS 201 - Introductory Clinical Experience (1)
 ILAS 301 - Second Clinical Experience (2)
 PHYS 401 - The Professional Physics Teacher (1)
 (must be taken concurrently with PHYS 495)
 PHYS 490X - Science across Time and Culture (2)
 PHYS 493X - Interdisciplinary Teaching of Science in Secondary Education (3)
 PHYS 495 - Teaching of Physical Sciences (3)
 (must be taken concurrently with PHYS 401)
 PHYS 496 - Transition to the Professional Physics Teacher (1)
 PHYS 497 - Student Teaching (Secondary) in Physics/Physical Sciences (10)
 SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

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 licensure program.

Physics Honors Program

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 (25)

MATH 230 - Calculus II (4)

*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)

Nine additional hours selected from the following; PHYS 300,
PHYS 320, PHYS 367, PHYS 370, PHYS 374, PHYS 375,
PHYS 383, PHYS 385 or any 400-level physics course.

Six or more semester hours in the minor must be taken at NIU.

Course List

140. PHYSICS AND SOCIETY (3). Application of the fundamental principles of physics such as mechanics, heat, waves, light and optics, or modern physics, to contemporary issues facing society, and discussion of their implications. Topics will be selected depending on current events and concerns, and may include energy sources, nuclear weapons, medical physics, and identifying pseudoscience, among others.

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 acoustics and acoustical measurements with modern electronic instruments. During the remainder of the course students choose experiments which fit their own particular interests. CRQ: PHYS 180 or consent of the department.

201X. THE PROFESSIONAL SECONDARY SCIENCE TEACHER (1). *Crosslisted as 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 253. PRQ: MATH 155 or equivalent or CRQ: MATH 229.

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, MATH 203, and PHYS 211 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 (1-3). 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 284. CRQ: PHYS 383.

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.

383. INTERMEDIATE QUANTUM PHYSICS (3). Development of quantum mechanics; applications of Schrodinger equation to simple systems, atoms, molecules, and solids; quantum statistics; relativistic kinematics; applications in particle and nuclear physics. PRQ: PHYS 283.

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, nonlinear 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 (1-3). 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, PHYS 370 and PHYS 383.

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 licensure 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 licensure 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 (7-12). 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

Laurence Lurio, Ph.D., Harvard University, professor, chair
 Gerald Blazey, Ph.D., University of Minnesota, Distinguished Research Professor
 Dennis Brown, Ph.D., Stanford University, associate professor
 Dhiman Chakraborty, Ph.D. State University of New York, Stony Brook, Presidential Research Professor
 Omar Chmaissem, Ph.D., Université Joseph Fourier (Grenoble), associate professor
 George Coutrakan, Ph.D., State University of New York, Stony Brook, associate professor
 Bogdan Dabrowski, Ph.D., Northwestern University, Distinguished Research Professor
 Michael Eads, Ph.D., Northern Illinois University, assistant professor
 Bela Erdelyi, Ph.D., Michigan State University, associate professor
 Michael Fortner, Ph.D., Brandeis University, associate professor
 Andreas Glatz, Ph.D., Cologne University (Germany), associate professor
 David Hedin, Ph.D., University of Wisconsin, Distinguished Research Professor, Board of Trustees Professor
 Yasuo Ito, Ph.D., Cambridge University, associate professor
 Stephen P. Martin, Ph.D., University of California at Santa Barbara, Distinguished Research Professor, Distinguished Teaching Professor
 Susan M. Mini, Ph.D., Southern Illinois University, professor
 Philippe Piot, Ph.D., University of Grenoble (France), Presidential Research Professor
 Young-Min Shin, Ph.D., Seoul National University (Korea), assistant professor
 Carol Thompson, Ph.D., University of Houston, professor
 Michel van Veenendaal, Ph.D., Rijksuniversiteit (Groningen), Distinguished Research Professor
 Roland Winkler, Ph.D., University of Regensburg (Germany), associate professor
 Zhili Xiao, Ph.D., University of Konstanz (Germany), Presidential Research Professor, Board of Trustees Professor

Department of Political Science (POLS, PSPA)

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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 210 - Introduction to Law and Courts (3)
POLS 220/PSPA 220X - 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). Students should complete POLS 340 by the end of their junior year. Students are also strongly encouraged to complete POLS 340 prior to taking STAT 301 or STAT 350.

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 46-51 (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 210 - Introduction to Law and Courts (3)
POLS 220/PSPA 220X - 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 310 - The U.S. Supreme Court (3)
- POLS 312 - Law and Film (3)
- POLS 314 - Law, Politics, and Baseball (3)
- POLS 317 - Judicial Politics (3)
- POLS 323 - Biomedicine and the Law (3)
- POLS 324 - Politics of Environmental Health, and Safety Regulation (3)

- POLS 354 - Natural Right and Law (3)
- POLS 358 - Religion and the Constitution (3)
- POLS 389 - International Law and Organization (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 419 - Mock Trial (3) (may be repeated to 6 semester hours)

- POLS 495¹ - 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). Students should complete POLS 340 by the end of their junior year. Students are also strongly encouraged to complete POLS 340 prior to taking STAT 301 or STAT 350.

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)

POLS 331 - Public Administration (3)

OR PSPA 331X - Public Administration (3)

Two of the following (6)

- POLS 150 - Democracy in America (3)
- POLS 210 - Introduction to Law and Courts (3)
- POLS 220/PSPA 220X - 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)

One of the following (3)

- POLS 322 - Politics and the Life Sciences (3)
- POLS 323 - Biomedicine and the Law (3)
- POLS 324 - Politics of Environmental Health, and Safety Regulation (3)

POLS 356 - American Political Thought I (3)

POLS 382 - Topics in Contemporary Security (3)

POLS 383 - International Political Economy (3)

POLS 389 - International Law and Organization (3)

Two of the following (6). Recommended that POLS 331 OR PSPA 331X be taken before enrolling in the following courses.

POLS 302 - Government in Metropolitan Areas (3)

OR PSPA 302X - Government in Metropolitan Areas (3)

POLS 303 - State and Local Government (3)

OR PSPA 303X - State and Local Government (3)

POLS 308 - The American Presidency (3)

POLS 326 - Nonprofit Management (3),

OR PSPA 326X - Nonprofit Management (3)

POLS 327 - E-Governance (3),

OR PSPA 327X - E-Governance (3)

POLS 330 - Bureaucracy and the Public Policy Processes (3),

OR PSPA 330X - Bureaucracy and the Public Policy Process (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 220/PSPA 220X - Introduction to Public Policy (3), and POLS 340 - Political Analysis (3). Students should complete POLS 340 by the end of their junior year. Students are also strongly encouraged to complete POLS 340 prior to taking STAT 301 or STAT 350. 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 210 - Introduction to Law and Courts (3)
- POLS 220/PSPA 220X - 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 359 - War, Empire, and Ethics (3)
- POLS 362 - Politics of Developing Areas (3)
- POLS 380 - American Foreign Policy (3)
- POLS 381 - Regional Security (3)
- POLS 382 - Topics in Contemporary Security (3)
- POLS 383 - International Political Economy (3)
- POLS 384 - Contemporary Foreign Policy (3)
- POLS 386 - Global Terrorism (3)
- POLS 387 - International Security (3)
- POLS 388 - U.S. National Security Policy (3)
- POLS 389 - International Law and Organization (3)

Two of the following (6)

- POLS 360 - Government and Politics in Western Europe (3)
- POLS 361 - British Government and Politics (3)
- POLS 363 - Dictators and Democracies (3)
- POLS 365 - The Origins of Political Order (3)
- POLS 366 - Politics of Russia and Eurasia (3)
- POLS 368 - Politics of 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 375 - Middle East Politics (3)
- POLS 376 - Political Violence (3)
- POLS 377 - Revolt, Revolution and Genocide (3)
- POLS 378 - Political Islam (3)

¹ May be counted toward the emphasis when topic is appropriate.

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). Students should complete POLS 340 by the end of their junior year. Students are also strongly encouraged to complete POLS 340 prior to taking STAT 301 or STAT 350.

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 4, International Politics: 36-48 (B.A.) OR 46-51 (B.S.)

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.

Emphasis 5. Justice and Democracy: The American Experiment

Requirements in Department (36)

Foundational Courses (6)

Two of the following (6)

POLS 150 - Democracy in America (3),

OR POLS 100 - American Government and Politics (3)

POLS 210 - Introduction to Law and Courts (3)

POLS 251 - Introduction to Political Philosophy (3)

Exploring Democracy in America (9)

Three courses (9 semester hours) in at least two out of the three categories below (American Political Thought, Political Behavior, American Institutions).

American Political Thought Courses (3)

POLS 355 - African-American Political Thought (3)

POLS 356 - American Political Thought I (3)

POLS 357 - American Political Thought II (3)

POLS 358 - Religion and the Constitution (3)

Political Behavior Courses (3)

POLS 304 - American Public Opinion (3)

POLS 305 - Political Parties and Elections (3)

POLS 309 - American Electoral Democracy (3)

American Institutions Courses (3)

POLS 307 - The U.S. Congress (3)

POLS 308 - The American Presidency (3)

POLS 310 - The U.S. Supreme Court (3)

POLS 317 - Judicial Politics (3)

Questions of Justice in Democracy in America (6)

One of the following Public Law Courses (3)

POLS 410 - Constitutional Law I (3)

POLS 411 - Constitutional Law II (3)

POLS 412 - Constitutional Law III (3)

POLS 415 - Criminal Law (3)

POLS 418 - Jurisprudence (3)

One of the following Political Theory Courses (3)

POLS 351 - Liberalism and Its Critics (3)

POLS 353 - Democratic Theory (3)

POLS 354 - Natural Right and the Law (3)

Senior Seminar (3)

POLS 494 - Senior Seminar in Political Science (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). Students should complete POLS 340 by the end of their junior year. Students are also strongly encouraged to complete POLS 340 prior to taking STAT 301 or STAT 350.

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 Requirements for the B.S. Degree")

Total Hours for Emphasis 5, Justice and Democracy: The American Experiment: 36-48 (B.A.) OR 46-51 (B.S.)

Professional Educator Licensure – Social Sciences: Political Science

Students who want to be licensed to teach political science at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in political science.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education Program when they have

established a file with the History and Social Sciences Secondary Teacher Education Program 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;

passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

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;

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

obtained approval from the History and Social Sciences Secondary office of Teacher Education Program

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program.

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 for Secondary Educators. 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and certification.

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History and Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

Six-Year (3+3) Integrated B.S. or B.A./J.D. Program in Political Science and the College of Law

Admission

The six-year integrated sequence leads to both the B.S. or B.A. in Political Science and J.D. degrees. Students who want to complete this program must identify themselves to the Political Science Department as majors who will complete the 3+3 Program with a Politics Emphasis. This program is open to all undergraduates who major in Political Science and have completed at least 90 credit hours of undergraduate course work with a minimum GPA of 3.25. Juniors who have met these standards in their B.S. or B.A. degree in Political Science must also apply for admission to NIU's College of Law under the special provisions of this program. The application to the College of Law must be submitted no later than February 15 of the applicant's junior year. As part of the application to the College of Law, applicants must take the LSAT no later than February of their junior year and must score above the 50th percentile of the previous year's matriculating law class.

Curriculum

Students must complete all the requirements for the Political Science B.A. or B.S. degrees as well as all general education requirements (90 credit hours in total) by the end of their junior year. Beginning with the first semester of their senior year, students will start taking classes at the College of Law. These courses will count toward the final 30 credits of the undergraduate degree. The final two years of the program will follow the standard College of Law timetable.

Degree with Honors**Requirement for admission for continuing NIU students:**

Any student who has completed at least 60 semester hours of course work at NIU and has completed 15 semester hours of political science courses at NIU with a grade point average of 3.70 or higher (both cumulative and in the major) is eligible for admission to the political science honors program.

Requirement for acceptance for transfer students:

Transfer students must meet the following three criteria for acceptance into the honors program:

- 1) Students must complete at least 15 semester hours at NIU, including two 300- or 400-level political science courses. Students must earn a cumulative GPA of at least 3.70 in those courses.
- 2) Students must obtain a letter of nomination from one political science tenured or tenure-track faculty member. The letter of nomination should be sent to the department's director of undergraduate studies.
- 3) Students must be approved for the honors program by the department's undergraduate committee.

Senior transfer students will not be eligible for the honors program.

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 415).

Requirements to Graduate with Honors:

In addition to all degree requirements, students must complete three requirements to graduate with honors in political science:

- 1) Complete at least 3 semester hours of POLS 491
- 2) Complete at least 3 semester hours of 496
- 3) Complete 1 semester hour of POLS 497 no more than two semesters prior to the semester in which they complete the thesis (499).
- 4) Complete 3 semester hours of POLS 499 within two semesters following completion of POLS 497. The honors thesis must be approved by the student's thesis director and a faculty member appointed by the director of undergraduate studies.

Students must maintain a GPA of at least 3.70 both in the major and cumulative to graduate with honors. Students who fail to receive at least a B in POLS 497, and POLS 499 and a S in POLS 491 will not graduate with honors. Students are expected to present their honors thesis at the annual Undergraduate Research and Artistry Day held in April.

Withdrawal from the program:

Students may choose to withdraw from the honors program at any time. If students are taking POLS 491, POLS 497, or POLS 499 when they decide to withdraw, they must either complete that course or drop it. If students choose to drop the course, they must do so before the university deadline for course withdrawal.

For more information on the department's honors program, please contact the department's director of undergraduate studies.

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/PSPA 220X - 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 (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

Political Science (POLS)

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.

300. AMERICAN PRESIDENTIAL ELECTIONS (3). Survey and analysis of candidates, issues, and partisan trends in presidential elections from the era of the New Deal to the present. Also considers how election rules and campaign styles have changed over time. Recommended: At least sophomore standing.

301. POLITICAL PSYCHOLOGY (3). Examination of the social connections that form the basis of citizen views about politics. Emphasis on group identities, political information processing, cognition, and the role of emotions in American politics. Not available to students who have credit for POLS 407. Recommended: At least sophomore standing or consent of the department.

302. GOVERNMENT IN METROPOLITAN AREAS (3). *Crosslisted as PSPA 302X*. 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. Recommended: At least sophomore standing or consent of department.

303. STATE AND LOCAL GOVERNMENT (3). *Crosslisted as PSPA 303X*. Examines the structure, functions, and governance dynamics of local and state governments. Includes relationships of local and state government legislative, executive, and administrative actors; management processes; and intergovernmental relations. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

306. THE MASS MEDIA IN AMERICAN POLITICS (3). Examination of the influence of the mass media and the elite media on American politics with particular emphasis on how the media relates to other systems of power and authority. Recommended: At least sophomore standing.

307. THE U.S. CONGRESS (3). Principles, organization, procedures, and activities of the U.S. Congress. Topics include elections, legislators and their districts, legislative committees, party leadership positions, and legislative-executive relations. Recommended: At least sophomore standing.

308. THE AMERICAN PRESIDENCY (3). Examination of the nature and evolution of the modern presidency and the leadership role of the president in such areas as administration, legislative affairs, and national security. Topics may also include selection, impeachment and presidential reputation. Recommended: At least sophomore standing.

309. AMERICAN ELECTORAL DEMOCRACY (3). Exploration of several facets of American Electoral Democracy, including voter eligibility, direct democracy, campaign finance, redistricting, the electoral college, and the mechanics of voting. Recommended: POLS 305.

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. Recommended: At least sophomore standing.

Public Law

210. INTRODUCTION TO LAW AND COURTS (3). Introduction to the study of law and courts, including legal theory, judicial institutions, legal actors, legal systems and ways in which law is interrelated with politics, public policy and society.

310. THE U.S. SUPREME COURT (3). Principles, organization, procedures, and activities of the U.S. Supreme Court. Topics include appointments, public opinion, agenda-setting, oral argument, decision-making, opinion writing, and the Court's relationship to other institutions including lower courts and the legislative and executive branches. Recommended: At least sophomore standing.

312. LAW AND FILM (3). Analysis of feature films to explore topics such as law school and the legal profession, criminal and civil law, civil rights and liberties, and justice as it relates to race, gender, and class. (NOTE: POLS 312 used to be taught as one of the topics under POLS 414.)

314. LAW, POLITICS, AND BASEBALL (3). Analysis of the legal and political aspects of baseball to explore topics such as the relationship between business and government, antitrust law, labor-management relations, and discrimination as it relates to race, gender, and class. (NOTE: POLS 314 used to be taught as one of the topics under POLS 414.)

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. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

412. CONSTITUTIONAL LAW III (3). The First Amendment: freedoms of speech, association, assembly, press, and religion, and the right to privacy. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

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: At least sophomore standing.

418. JURISPRUDENCE (3). Analysis of the foundations of legal systems. Interrelationship of law, morality, and politics. Recommended: At least sophomore standing.

419. MOCK TRIAL (3). Collegiate mock trial competitions. Case preparation as an advocate for either side; role playing as witnesses and trial attorney; understanding and using the rules of evidence; actual trial advocacy; research and delivering arguments. May be repeated to a maximum of 6 semester hours.

Public Policy/Public Administration

220. INTRODUCTION TO PUBLIC POLICY (3). *Crosslisted as PSPA 220X*. 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. Recommended: At least sophomore standing.

321. THE ORIGIN OF POLITICS (3). Drawing on a version of modern evolutionary theory to frame the approach to studying political behavior, examines the biological bases of political behavior. Intersection of biological and social sciences is tapped for insights and new interpretations of political attitudes and behaviors. Recommended: At least sophomore standing.

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. Recommended: 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. Recommended: At least sophomore standing.

324. POLITICS OF ENVIRONMENTAL, HEALTH, AND SAFETY REGULATION (3). How environmental, health, and safety risks are assessed and regulated in the United States. May include study of the role scientists, interest groups, public opinion, the media, political culture, economics, and other factors play in risk assessment and regulation, and may involve participation in faculty research. Recommended: At least sophomore standing.

326. NONPROFIT MANAGEMENT (3). *Crosslisted as PSPA 326X*. Examines the role of nonprofit organizations in the policy process from advocacy through service delivery. Emphasis on management/administration and the delivery of public services. Recommended: At least sophomore standing.

327. E-GOVERNANCE (3). *Crosslisted as PSPA 327X*. Examines the policy issues and management practices associated with the use of information and communication technologies in governance. Governance includes the production and delivery of public information and services as well as citizen and stakeholder participation in making those production and delivery decisions. Issues include information access, digital divide, electronic privacy and security, and online citizen participation. Topics on managing information technology in government include e-government web portals, information resource management, knowledge management, strategic information technology management, and others.

330. BUREAUCRACY AND THE PUBLIC POLICY PROCESS (3). *Crosslisted as PSPA 330X*. 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. Recommended: At least sophomore standing.

331. PUBLIC ADMINISTRATION (3). *Crosslisted as PSPA 331X*. Leadership, decision making, organizational behavior, program effectiveness, and fiscal management in public administrative agencies. Recommended: At least sophomore standing.

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. PRQ: Political science major.

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.

350. CLASSICAL AND MEDIEVAL POLITICAL THEORY (3). Analysis of the fundamental problems of classical and medieval political philosophy. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

353. DEMOCRATIC THEORY (3). Examination of both the abstract ideal of democracy and issues relating to its practical application within political societies. Contemporary democratic theory is studied in relation to the history of political thought with a view to assessing the desirability, fairness, and practicability of democracy as a form of government. Readings include Jean-Jacques Rousseau and Alexis de Tocqueville along with prominent contemporary scholars.

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. Recommended: At least sophomore standing.

355. AFRICAN-AMERICAN POLITICAL THOUGHT (3). Examination and critical analysis of African-American political and social ideas, from the colonial period to the end of the 20th century. Study of the social and political aspects of African-American society through the use of primary materials, speeches, and published articles from African-American political and social leaders. Recommended: At least sophomore standing.

356. 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. Recommended: At least sophomore standing.

357. 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. Recommended: At least sophomore standing.

358. 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. Recommended: At least sophomore standing.

359. WAR, EMPIRE, AND ETHICS (3). Examination of questions of justice and interest as they arise in the context of war. Study of views of political philosophers and historians. Representative authors include Thucydides, Machiavelli, Kant, Hobbes, and Walzer. Recommended: At least sophomore standing.

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. Recommended: At least sophomore standing.

361. BRITISH GOVERNMENT AND POLITICS (3). Development, structure, functions, and processes of government and politics in Great Britain. Recommended: At least sophomore standing.

362. POLITICS OF DEVELOPING AREAS (3). Broad comparative introduction to the problems and politics of developing areas (i.e., Asia, Latin America, Middle East). Recommended: At least sophomore standing.

363. DICTATORSHIPS AND DEMOCRACIES (3). Examination of a range of approaches to studying democracy and authoritarianism across the world, including those, which emphasize political culture, economic growth and crisis, political elites, class conflict, civil society and globalization. Case studies may focus on specific regions of the world.

365. ORIGINS OF POLITICAL ORDER (3). A comparative examination of the process of state formation and the character of state-society relations across the world. In examining different regions, the course will draw upon and seek to contribute to theoretical understandings of how states are constructed and how they relate across time and space—with various social forces. Case studies may focus on specific regions of the world.

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. Recommended: At least sophomore standing.

368. POLITICS OF AFRICA (3). Colonialism and nationalism in Africa; the emergence of independent governments; contemporary political and administrative problems. Recommended: 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. Recommended: 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. Recommended: 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. Recommended: At least sophomore standing.

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: At least sophomore standing.

376. POLITICAL VIOLENCE (3). Introduction to theories of political conflict, political opposition, and methods of concluding violent conflicts, including war. Recommended: At least sophomore standing.

377. REVOLT, REVOLUTION AND GENOCIDE (3). Comparative analysis of revolts, revolutions and genocide examining such questions as the failure and success of revolts and revolutions in bringing about democracy; the role modern communications play in revolts and revolutions; the links between revolts, revolutions and genocide; and the role of the international community in preventing and redressing incidents of genocide.

378. POLITICAL ISLAM (3). Analysis of various political and social phenomena in the Muslim-dominant nations including Islamic movements, religious parties, Islam and democracy, Islamic courts and laws, women's rights, religious radicalism and violence.

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. Recommended: At least sophomore standing.

381. REGIONAL SECURITY (3). Survey of issues in regional security, highlighting the politics of cooperation and conflict in one or more regions of the world and analyzing the repercussions of regional security issues on the international system.

382. TOPICS IN CONTEMPORARY SECURITY (3). Analysis of major theoretical perspectives and debates associated with contemporary conflicts, including issues such as terrorism, drone warfare, civil wars, conflict in developing nations, inter-state conflict, nuclear weapons development, small-arms proliferation, and religious violence.

383. INTERNATIONAL 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. Recommended: At least sophomore standing.

384. CONTEMPORARY FOREIGN POLICY (3). Examination of contemporary foreign policy, with emphasis on the determinants, objectives, and strategies of selected states and regions. May be repeated to a maximum of 9 hours. Recommended POLS 285. PRQ: At least a 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? Recommended: At least sophomore standing.

387. INTERNATIONAL SECURITY (3). Survey of the most salient issues in international security, including topics such as nuclear proliferation, intrastate conflicts, conflict management, and interstate rivalry.

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. Recommended: At least sophomore standing.

389. 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. Recommended: At least sophomore standing.

General

392. POLITICS AND FILM (3). Analysis of feature films to explore topics such as war, revolution, civil liberties, alienation, and conflict rooted in race, gender, and class. Recommended: At least sophomore standing.

393. POLITICAL SCIENCE CAREER (1). Exploration of career options for political science majors. This one-credit course will assist students with the identification of career paths, the development of skills (e.g., résumé creation, interviewing techniques, adopting professional attitudes and behavior), and provide coaching and mentoring opportunities. PRQ: Political science major and sophomore or junior standing.

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. May be taken a total of three times as topic changes. Enrollment in multiple sections of POLS 395 in a semester is permitted. Recommended: At least sophomore standing.

401X. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ANTH 401X, ECON 401X, GEOG 401X, HIST 401, PSYC 401X, and SOCI 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

490. INTERNSHIP IN POLITICAL SCIENCE (1-6). Admission upon written approval by the internship coordinator for the Department of Political Science. Credit awarded to qualified students upon completion of an internship or other experiential learning related to the field and writing assignments. May be repeated to a maximum of 6 semester hours with department approval.

491H. HONORS APPRENTICESHIP (3). Students have three options: (1) internship, (2) teaching assistantship, (3) research assistantship. May be repeated to a maximum of 6 semester hours. PRQ: Admission to departments honors program and permission of instructor. S/U grading.

492. MODEL UNITED NATIONS (1). Develop understanding of global governance, the functioning of the United Nations, and contemporary issues of international conflict and collaboration through study of these issues, and participation in organized United Nations simulations where students will represent the countries NIU is fielding in a given semester. S/U grading.

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. Recommended: At least sophomore standing.

496. INDEPENDENT STUDY IN POLITICAL SCIENCE (1-6). 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.

496H. HONORS INDEPENDENT STUDY IN POLITICAL SCIENCE (3). Special readings and topics in political science. Students will attend a 500(600)-level Political Science graduate seminar, with assignments modified as appropriate for an Honors undergraduate. May be repeated to a maximum of 6 semester hours. PRQ: Admission to departments honors program and permission of instructor.

496X. HISTORY AND SOCIAL SCIENCE INSTRUCTION FOR SECONDARY EDUCATORS (3). *Crosslisted as ANTH 496X, ECON 496X, GEOG 496X, HIST 496, PSYC 496X, and SOCI 496X.* Organization and presentation of materials for history and social science courses at the secondary levels. PRQ: Admission to the history or social science secondary teacher education program and permission of the Department of History's office of secondary teacher education.

497. SMALL-GROUP STUDY IN POLITICAL SCIENCE (1). Small groups of participants study topics under the guidance of an instructor. May be repeated to a maximum of 8 semester hours, but only 6 semester hours may be applied towards the major. Students may enroll up to three credit hours per semester. Recommended: At least sophomore standing.

498. SEMINAR ABROAD (3-9). A foreign study course to be arranged with the department chair.

499H. SENIOR HONORS THESIS (1-3). Preparation of an honors thesis under the guidance of a faculty member. May be repeated to a maximum of 4 semester hours. PRQ: Admission to department and/or university honors program and permission of instructor.

Political Science Faculty

Matthew J. Streb, Ph.D., Indiana University, associate professor, chair

Larry E. Arnhart, Ph.D., University of Chicago, Distinguished Research Professor, adjunct professor emeritus

Michael Buehler, Ph.D., London School of Economics and Political Science, associate professor

Michael Clark, Ph.D., University of California, Santa Barbara, assistant professor

Gary D. Glenn, Ph.D., University of Chicago, Distinguished Teaching Professor, adjunct professor emeritus

Kikue Hamayotsu, Ph.D., Australian National University, associate professor

Rebecca J. Hannagan, Ph.D., University of Nebraska, associate professor

Shanthi Karuppusamy, Ph.D., Wayne State University, assistant professor

Craig S. Maher, Ph.D., University of Wisconsin, Milwaukee, associate professor

J. Mitchell Pickerill, Ph.D., University of Wisconsin, associate professor

Andrea Radasanu, Ph.D., University of Toronto, associate professor

Scot Schraufnagel, Ph.D., Florida State University, associate professor

S. Adam Seagrave, Ph.D., University of Notre Dame, assistant professor

H. Brendon Swedlow, Ph.D., University of California, Berkeley, associate professor

Kheang Un, Ph.D., Northern Illinois University, assistant professor

Daniel H. Unger, Ph.D., University of California, Berkeley, associate professor

Artemus E. Ward, Ph.D., Syracuse University, associate professor

Mikel L. Wyckoff, Ph.D., University of Maryland, adjunct associate professor emeritus

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 licensure 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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

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: Animal Cognition (4)

PSYC 412 - Experimental Psychology: Human Learning and Memory (4)

PSYC 413 - Clinical Psychology Laboratory (4)

PSYC 431 - Neuropsychology (4)

PSYC 433 - Social and Personality Laboratory (4)

PSYC 434 - Industrial-Organizational Psychology 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 (4)

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 213 - Introductory Bacteriology (3),

OR BIOS 357 - Human Anatomy and Physiology (5)

*CHEM 210 - General Chemistry I (3), and *CHEM 212 -

General Chemistry Laboratory I (1),

*CHEM 211 - General Chemistry II (3), and *CHEM 213 -

General Chemistry Laboratory II (1)

*PHYS 210 - General Physics I (4), and *PHYS 211 - General

Physics II (8)

**Total Hours for a Major in Psychology: 38-51 (B.A.)
OR 49-51 (B.S.)**

Professional Educator Licensure – Social Sciences: Psychology

Students who want to be licensed to teach psychology at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in psychology.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education Program when they have

established a file with the History and Social Sciences Secondary Teacher Education Program 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;

passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

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;

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

obtained approval from the History and Social Sciences Secondary Teacher Education Program

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program.

Department Requirements

Students must complete the requirements for a degree in psychology. In addition, they must complete PSYC 496X, History and Social Science Instruction for Secondary Educators. 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

The History and Social Sciences Secondary Teacher Education Program complies with all ISBE rules as they relate to licensure as outlined in Title 23, Part 25 of the Illinois Administrative Code and all other applicable state laws and university requirements. Students should consult with the History & Social Sciences Secondary Teacher Education Program to determine the necessary requirements to obtain educator licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

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. Students who have achieved at least a 3.20 GPA overall and a 3.50 in psychology courses should apply for admission as early as possible because the Psychology Honors program requires specific course work. A letter of interest addressed to the Director of Undergraduate Studies serves as an application.

Requirements

Completion of the psychology major requirements for the baccalaureate degree.

A cumulative GPA of at least 3.20 overall and 3.50 in psychology courses.

Completion of at least 6 of the required 15 semester hours of elective credit at the 300-400 level with honors (of which 3 hours must be PSYC 306, Advanced Research Methods, taken for Honors credit).

Completion of 4-6 hours of PSYC 499.

Completion of a written honors proposal and thesis, which are orally presented to the Psychology Honors Committee to the satisfaction of the faculty adviser and Honors Committee. NOTE: Successful completion of the Honors Thesis will count as one laboratory course for the purpose of meeting department B.A. or B.S. requirements.

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.

306. ADVANCED RESEARCH METHODS (3). Advanced research methods and the design of experiments in psychology. Detailed examination of experimental planning, design, analysis and interpretation for research in psychology. Emphasis on the development of individual research projects. Open only to students enrolled in the University Honors Program or the Department of Psychology Honors Program, or by consent of department. PRQ: At least sophomore standing, PSYC 102, a grade of C or better in a statistics course (STAT 208, STAT 301, or STAT 350) and PSYC 305, 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.

401X. THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2). *Crosslisted as ANTH 401X, ECON 401X, GEOG 401X, HIST 401, POLS 401X, and SOCI 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

410. EXPERIMENTAL PSYCHOLOGY: PERCEPTION (4). Method and theory in the psychology of perception, covering behavioral, phenomenological and neurological approaches. Emphasis is on the active role of the brain and higher-order cognitive processes in creating our perceptual experiences, particularly vision. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and either PSYC 300 or PSYC 345; or consent of department

411. EXPERIMENTAL PSYCHOLOGY: ANIMAL COGNITION (4). Examines the techniques and theories used to investigate processes related to learning across species with an emphasis on neural systems mediating performance. 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. NEUROPSYCHOLOGY (4). *Crosslisted as BIOS 431X.* Understanding the physiological functioning of the body as it affects normal and dysfunctional behavior with an emphasis on examining clinical cases and neural pathologies. Lecture and laboratory. PRQ: At least junior standing, PSYC 305 and 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.

434. INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY LABORATORY (4). Introduction, training, and practice in the research techniques used in the study of industrial-organizational psychology. Lecture and laboratory. PRQ: At least junior standing, PSYC 305, and one of the following: PSYC 332, PSYC 372, PSYC 471, 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 (1-3).** Qualified students interested in specific problems in psychology work with a faculty member in the department. May be repeated to a maximum of 9 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 FOR SECONDARY EDUCATORS (3).** *Crosslisted as ANTH 496X, ECON 496X, GEOG 496X, HIST 496, POLS 496X, and SOCI 496X.* Organization and presentation of materials for history and social science courses at the secondary levels. PRQ: Admission to the history or social science secondary teacher education program and permission of the Department of History's office of secondary teacher education.

498. **HONORS INDEPENDENT STUDY (1-3).** 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. 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, admission to the university honors program, and consent of department.

499. **SENIOR HONORS RESEARCH THESIS (1-3).** 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

Gregory A. Waas, Ph.D., University of Wisconsin, Madison, associate professor, chair
 Larissa K. Barber, Ph.D., Saint Louis University, assistant professor
 David J. Bridgett, Ph.D., Washington State University, assistant professor
 M. Anne Britt, Ph.D., University of Pittsburgh, Presidential Teaching Professor
 Michelle K. Demaray, Ph.D., University of Wisconsin, professor
 Amanda M. Durik, Ph.D., University of Wisconsin, Madison, associate professor
 Lisa M. Finkelstein, Ph.D., Tulane University, associate professor
 Angela Grippo, Ph.D., University of Iowa, assistant professor
 Michelle M. Lilly, Ph.D., University of Michigan, assistant professor
 Mary C. Lovejoy, Ph.D., University of Iowa, associate professor
 Joseph P. Magliano, Ph.D., University of Memphis, Presidential Research Professor
 Christine K. Malecki, Ph.D., University of Wisconsin, Presidential Engagement Professor
 Leslie Matuszewich, Ph.D., University of Buffalo, associate professor
 Keith K. Millis, Ph.D., Memphis State University, professor
 Nina S. Mounts, Ph.D., University of Wisconsin, professor
 Holly K. Orcutt, State University of New York, Buffalo, associate professor
 Christopher P. Parker, Ph.D., Rice University, associate professor
 Lisa A. Paul, Ph.D., University of Wyoming, assistant professor
 Bradford H. Pillow, Ph.D., Stanford University, associate professor
 Laura D. Pittman, Ph.D., University of Connecticut, Storrs, associate professor
 Alan Rosenbaum, Ph.D., State University of New York, Stony Brook, professor
 Brad J. Sagarin, Ph.D., Arizona State University, professor
 Alecia M. Santuzzi, Ph.D., Tulane University, assistant professor
 John J. Skowronski, Ph.D., University of Iowa, Distinguished Research Professor
 David P. Valentiner, Ph.D., University of Texas, professor
 Douglas Wallace, Ph.D., Kent State University, associate professor
 Katja Wiemer, Ph.D., University of Memphis, associate professor
 Kevin D. Wu, Ph.D., University of Iowa, associate professor

Department of Public Administration (PSPA)

The mission of the Department of Public Administration is to advance excellence in public management by preparing men and women for public service careers. The department focuses principally on the dynamics of leading and managing organizations that address political, social, economic, environmental, and administrative problems in the public and non-profit sectors. The department has no undergraduate major. Rather, it provides service courses to a wide variety of majors and minors, including the majors in political science, applied management, and community leadership and civic engagement; and the minors in black studies, urban studies, and public administration to support undergraduate students who aspire to a public service career.

Certificate of Undergraduate Study

Public Sector Leadership (12-14)

The certificate prepares students to take leadership roles within public service organizations. Leadership skill and knowledge are fundamental for individuals contemplating or currently pursuing career positions with public service organizations. Knowing how to frame a vision, how to think strategically, how to solve problems, how to motivate employees, and how to adapt an organization to complex environmental change is all part of being a public service leader.

The certificate 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 cumulative GPA of at least 3.00 in all certificate courses, and complete all certificate course work within six calendar years. Some of the courses may, with the approval of the major department, be applied toward an undergraduate major.

Requirements

PSPA 201 - Public Service Leadership (3)

PSPA 331X - Public Administration (3)

At least two of the following (6-8)

PSPA 302X - Government in Metropolitan Areas (3)

PSPA 303X - State and Local Government (3)

PSPA 327X - E-Governance (3)

PSPA 330X - Bureaucracy and the Public Policy Process (3)

PSPA 395 - Contemporary Topics in Public Service (3) (may be repeated to a maximum of 6 semester hours)

PSPA 410 - Supervision in the Public Sector (1)

PSPA 411 - The Ethical Public Administrator (3)

PSPA 412 - Public Budgeting (3)

PSPA 413 - Community Engagement in Public Safety Agencies (1)

Course List

Public Administration (PSPA)

201. PUBLIC SERVICE LEADERSHIP (3). Introduction to the traits and standards associated with leadership roles in public service, as distinguished from business and educational leadership. Exposure to the leadership and management of volunteers.

220X. INTRODUCTION TO PUBLIC POLICY (3). *Crosslisted as POLS 220*. 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.

301. PHILANTHROPY AND VOLUNTEERISM (3). Examination of the role of philanthropic activities in a civil society, the process of philanthropy, and the contribution that volunteerism makes to civil society. Survey of techniques, methods, and policies concerning volunteerism and philanthropy.

302X. GOVERNMENT IN METROPOLITAN AREAS (3). *Crosslisted as POLS 302*. 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 OR PSPA 303X.

303X. STATE AND LOCAL GOVERNMENT (3). *Crosslisted as POLS 303*. Examines the structure, functions, and governance dynamics of local and state governments. Includes relationships of local and state government legislative, executive, and administrative actors; management processes; and intergovernmental relations.

326X. NONPROFIT MANAGEMENT (3). *Crosslisted as POLS 326*. Examines the role of nonprofit organizations in the policy process from advocacy through service delivery. Emphasis on management/administration and the delivery of public services. PRQ: At least sophomore standing. Recommended: POLS 331 OR PSPA 331X.

327X. E-GOVERNANCE (3). *Crosslisted as POLS 327*. Examines the policy issues and management practices associated with the use of information and communication technologies in governance. Governance includes the production and delivery of public information and services as well as citizen and stakeholder participation in making those production and delivery decisions. Issues include information access, digital divide, electronic privacy and security, and online citizen participation. Topics on managing information technology in government include e-government web portals, information resource management, knowledge management, strategic information technology management, and others.

328. ROLE OF NONGOVERNMENTAL ORGANIZATIONS IN DEVELOPMENT (3). *Crosslisted as POLS 328X*. Exploration of the roles that nongovernmental organizations play in development activities in developing countries, with emphasis on nongovernmental organizations that support education and community development.

330X. BUREAUCRACY AND THE PUBLIC POLICY PROCESS (3). *Crosslisted as POLS 330*. 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.

331X. PUBLIC ADMINISTRATION (3). *Crosslisted as POLS 331*. Leadership, decision making, organizational behavior, program effectiveness, and fiscal management in public administrative agencies.

332. STRATEGIC PERFORMANCE MANAGEMENT OF PUBLIC SERVICE ORGANIZATIONS (3). An integrated approach to public service management theories and concepts, research, and modern practices related to strategic performance management and strategic planning in public service organizations for improved public performance, accountability and citizen participation.

395. CONTEMPORARY TOPICS IN PUBLIC SERVICE (3). Selected topics in the analysis and evaluation of public service phenomena in a variety of settings. Topics vary each semester and include such concerns as supervisory skills, strategic planning, governance relationships, democratic accountability, and other topics pertinent to leadership roles in public service organizations. May be taken a total of two times as different topics.

402. RESOURCE STRATEGIES FOR NONPROFIT ORGANIZATIONS (3). *Crosslisted as MGMT 402X*. Introductory survey of resource strategies for non-governmental public service organizations; including fundraising, grant writing, volunteer management, and oversight roles.

410. SUPERVISION IN THE PUBLIC SECTOR (1). State and municipal involvement in employee-management relations with emphasis on legislative, judicial, political, and social considerations. Comparisons with the private sector and the special bargaining problems of various units in the public sector are considered.

411. THE ETHICAL PUBLIC ADMINISTRATOR (3). A review of the ethical principles and standards associated with the public administration profession. Provides instruction to recognize and respond to ethical dilemmas.

412. PUBLIC BUDGETING (3). Introduction to the processes and politics of public budgeting, including the legal, political, and economic factors affecting budgeting in federal, state, and local governments in the United States.

413. COMMUNITY ENGAGEMENT IN PUBLIC SAFETY AGENCIES (1). Exploration of how community engagement can benefit public safety agencies, including a review of the various avenues to engage citizens in departmental activities and proper roles for such engagement.

Public Administration Faculty

Kurt M. Thurmaier, Ph.D., Syracuse University, professor, chair
 Yu-Che Chen, Ph.D., Indiana University, associate professor
 Gerald T. Gabris, Ph.D., University of Missouri, Distinguished Teaching Professor
 Heidi O. Koenig, Ph.D., Syracuse University, associate professor
 Frederick D. Mayhew, Ph.D., North Carolina State University, assistant professor
 Kimberly L. Nelson, Ph.D., North Carolina State University, assistant professor
 Michael T. Peddle, Ph.D., Northwestern University, associate professor, assistant chair
 Alicia M. Schatteman, Ph.D., Rutgers University, assistant professor
 Curtis H. Wood, Ph.D., University of Kansas, associate professor

Department of Sociology (SOCL)

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. Sociology is the study of the origins, organizations, institutions and structure of human society and the causal effects of human behavior in collective social action. Baccalaureate graduates in sociology find employment in a wide range of careers in such fields as community development, criminal justice, health services, policy development, public relations, and social services. The department also offers a minor in sociology, which should be of interest to students majoring in another social science program such as psychology or anthropology, in a program in family, consumer, and nutrition studies, or in history or philosophy.

A departmental honors program is available for outstanding students. Either the B.A. or B.S. degree can be used to gain licensure to teach social sciences at the junior and senior high school levels.

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in Department (38)

SOCI 170 - Introduction to Sociology (3)
 SOCI 300 - Foundations of Sociology (3)
 SOCI 301 - Classical Sociological Theory (3)
 SOCI 302 - Contemporary Sociological Theory (3)
 SOCI 377A - Sociological Inquiry I (4)
 SOCI 377B - Sociological Inquiry II (4)

Additional courses in sociology (18), at least 6 semester hours of which must be 400-level courses.

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)

Group 1

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

Group 2

*MATH 229 and MATH 230 - Calculus I and II (8)
 STAT 350 - Introduction to Probability and Statistics (3)

**Total Hours for a Major in Sociology: 40-53 (B.A.)
 OR 48-51 (B.S.)**

Professional Educator Licensure – Social Sciences: Sociology

Students who want to be licensed to teach sociology at the secondary level must declare their intention to do so with the History and Social Sciences Secondary Teacher Education Program at the earliest possible opportunity. Educator licensure involves significant requirements in addition to the completion of a degree in sociology.

Admission

Students are admitted to the History and Social Sciences Secondary Teacher Education Program when they have

established a file with the History and Social Sciences Secondary Teacher Education Program 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;

passed the Test of Academic Proficiency or met the requirements for an ACT/SAT/TAP substitution;

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;

met all other Illinois State Board of Education (ISBE) requirements for admission to an educator licensure program; and

obtained approval from the History and Social Sciences Secondary office of Teacher Education Program.

Retention

Students admitted to the program must maintain the GPA requirements and complete a satisfactory review of progress each semester with the History and Social Sciences Secondary Teacher Education Program.

Department Requirements

Students must complete the requirements for a degree in sociology. In addition, they must complete SOCI 496X, History and Social Science Instruction for Secondary Educators. 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 for Secondary Educators. Except in unusual circumstances, students are admitted to HIST 400 only upon satisfactory completion of all other work required for graduation and licensure.

Placement

The History and Social Sciences Secondary Teacher Education Program cannot guarantee geographic area, subject area, or availability of placements for clinical experiences including student teaching. All placements are arranged through the College of Liberal Arts and Sciences Office of School Partnerships and Placements.

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 (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 (4),
 OR SOCI 377B - Sociological Inquiry II (4)

A minimum of 6 semester hours of electives in sociology.

Six or more semester hours in the minor must be taken at NIU.

Certificate of Undergraduate Study

Criminology

The criminology certificate is designed to provide insight into the academic study—theoretical and empirical—of crime and the criminal justice system in contemporary society. The criminology certificate is recommended for all students interested in examining issues associated with the patterns, correlates, and explanations of crime, as well as societal responses to crime, both formal and informal. Courses that are proposed for certificate credit are already regularly offered in the Sociology bachelor degree program. The certificate is appropriate and intended for students studying for, or currently working in, a number of disciplines or careers related to the criminal justice and legal system, security, education, public health, social sciences, and human services.

The certificate program is open to all NIU undergraduates. Students must maintain good academic standing in the university, maintain a 2.00 grade point average in certificate courses and complete all certificate course work within six calendar years. All courses for the certificate must be completed at NIU. Certificate courses in Sociology may be counted toward undergraduate degree requirements in the department.

Requirements

SOCI 288 - Criminology (3)
 SOCI 289 - The Criminal Justice System (3)
 Any three of the following (3)
 SOCI 380 - Deviance in Society (3)
 SOCI 384 - Police in a Democratic Society (3)
 SOCI 386 - Peace and Social Justice (3)
 SOCI 388 - Punishment and Corrections (3)
 SOCI 390 - Internship in Sociology (3) with approval - may count up to 3 hours
 SOCI 395 - Contemporary Topics in Sociology (3) with approval of department
 SOCI 480 - Communities and Crime (3)
 SOCI 485 - Law and Society (3)
 SOCI 487 - Gender and Crime (3)
 SOCI 488 - Juvenile Delinquency (3)
 SOCI 492 - Comparative Criminology (3)
 SOCI 495 - Proseminar in Sociology (3) with approval of department
 SOCI 357 - Sociology of Gender (3),
 OR SOCI 361 - Race and Ethnicity (3),
 OR SOCI 450 - Social Inequality (3)

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.

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.

288. CRIMINOLOGY (3). Examination of the nature of crime and delinquency, crime statistics, and criminal behavior. Emphasis on social causes and theories of crime. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, and at least sophomore standing, or consent of department.

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, and at least sophomore standing, or consent of the department.

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.

300. 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.

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 300 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.

329X. INTERNATIONAL NGOs AND GLOBALIZATION (3). *Crosslisted as ANTH 429X and CLCE 429*. Review of the history of international nongovernmental organizations (INGOs) particularly changes since the advent of neoliberal globalization beginning in the late 1980s that heralded an "NGO boom." Examination of the political roles of INGOs and challenges negotiating multiple relationships with communities, governments, and social movements. PRQ: Junior standing or consent of instructor.

335. MIGRATION (3). *Crosslisted as GEOG 335X*. Examines the national and international dynamics of migration, the causes and effects of migration, migration policies, and the experiences of immigrant communities in the United States and beyond. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, 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.

353. SOCIOLOGY OF EDUCATION (3). Relationship of the educational system to the social structure; changing function of education in 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.

354. FAMILIES AND SOCIAL CHANGE (3). Introduction to family sociological and historical research, focusing on the diversity and adaptability of families in changing contemporary American society. 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.

356. HEALTH, AGING, AND SOCIETY (3). Examination of the social aspects of health and aging. Emphasis on health and aging as socially constructed, and social structures that constrain health and aging. Topics include inequality in morbidity, mortality, and the aging process; the social organization of health and aging services; caregiving; end-of-life issues; health financing and policy. 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 contemporary 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.

358. RACIAL AND ETHNIC MINORITY FAMILIES (3). Examination and comparison of the diversity of family life among racial/ethnic groups in the United States, focusing on the impact of historical colonization, immigration, assimilation patterns, 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.

361. RACE AND ETHNICITY (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 250 or SOCI 260 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: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

364. 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.

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. SOCIOLOGY OF ORGANIZATIONS (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: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

377A. SOCIOLOGICAL INQUIRY I (4). 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 300 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 300 or consent of department; STAT 208 or STAT 301 or STAT 350 or UBUS 223.

379. COLLECTIVE BEHAVIOR AND SOCIAL MOVEMENTS (3). History and analysis of spontaneous crowd behavior: mobs, panic, riots. History, theories, and strategies of community organizing and large scale social protest movements. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department..

380. **DEVIANCE IN SOCIETY (3).** Social deviance as a concept, including theory and research in mechanisms of social control, the social construction of norms, and norm violation as well as societal reactions to deviant behavior. The process of becoming a deviant, deviant subcultures, and their impact on individuals and society. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270, or consent of department.

384. **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 170 or SOCI 250 or SOCI 260 or SOCI 270; SOCI 289; or consent of department.

386. **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.

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 170 or SOCI 250 or SOCI 260 or SOCI 270; SOCI 289; or consent of the department.

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. May include a service-learning component. PRQ: SOCI 170 or SOCI 250 or SOCI 260 or SOCI 270 or consent of department. Recommended: SOCI 375.

395. **CONTEMPORARY TOPICS IN SOCIOLOGY (3).** Selected topics in the analysis of contemporary social phenomena. Topics vary each semester. May be taken a total of three times as topic changes. Enrollment in multiple sections of SOCI 395 in a semester is permitted. PRQ: SOCI 170 or consent of department.

401X. **THIRD CLINICAL SECONDARY SCHOOL EXPERIENCE IN HISTORY/SOCIAL SCIENCES (1-2).** *Crosslisted as ANTH 401X, ECON 401X, GEOG 401X, HIST 401, POLS 401X, and PSYC 401X.* Discipline-based clinical experiences for prospective secondary teachers in history and social sciences. 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. S/U grading. PRQ: Consent of department. CRQ: ANTH 496X or ECON 496X or GEOG 496X or HIST 496 or POLS 496X or PSYC 496X or SOCI 496X.

441. **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. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

450. **SOCIAL INEQUALITY (3).** The causes and consequences of multiple sources of inequality across social institutions and social locations. Empirical, theoretical, and methodological issues are examined and critically assessed. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

451. **MEDICAL SOCIOLOGY (3).** In-depth examination of health, illness, and medical care from a sociological perspective. Attention given to the structure of social relationships and how they relate to health, illness, and the medical institutions in society. The social meanings of health, illness, and medical care will be studied individually and structurally, including a global perspective. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

457. **FAMILIES IN GLOBAL PERSPECTIVE (3).** Examination and comparison of the diverse family institutions in selected societies, focusing on economic, sociodemographic, and cultural factors that are essential in shaping the changing forms, functions, and internal dynamics of families and households. Attention given to influences of the global economy, the status of women and children, gender roles within and outside of families, and tensions between family household economics and wage labor in the global market. A culminating experience integrating theory, methods, and scholarly writing is required. Recommended: SOCI 354 or SOCI 358. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department. Recommended: SOCI 354 or SOCI 358.

458. **SOCIOLOGY OF WORK (3).** A critical analysis of work in a capitalist system. Includes issues of mobility, discrimination, wages, accreditation and bureaucratization, technology and de-skilling, outsourcing, and mobilization. A culminating experience integrating theory, methods, and scholarly writing is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

459. **POLITICAL SOCIOLOGY (3).** Examines the interface of policies and society with an emphasis on the linkages of political institutions and other social institutions, in particular, power structures, the role of the state, and political and social elites. A culminating experience; integrating theory, methods, and scholarly writing is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

460. **SOCIAL STRUCTURE AND THE LIFE COURSE (3).** Aging as a lifelong process of development through socially structured, historically conditioned stages. Topics include cohort differences, role transitions, intergenerational relations, and age norms. Emphasis on stages prior to old age. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; 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. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 260 and SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

464. **SOCIOLOGY OF MENTAL HEALTH AND ILLNESS (3).** Examination of the definition, experience, and social distribution of mental health and illness, particularly in the United States. Emphasis on social factors as sources of distress and mental illness. Focus includes the stigma of mental illness and how mental illness is managed by treatment and legal systems. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

465. **SOCIOLOGY OF EVERYDAY LIFE (3).** Uses symbolic interactionist theory to examine the ways in which taken-for-granted aspects of everyday life such as public space, the workplace, home and family, and popular culture are shaped by microlevel processes. A culminating experience integrating theory, methods, and scholarly writing is required. PRQ: SOCI 260, SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

475. **HEALTH ORGANIZATIONS AND HEALTH CARE SYSTEMS (3).** Social structure and social relations in provider settings, including but not limited to hospitals, public health, ambulatory care, and nursing homes. Emphasis on differences in financing, utilization, staffing, and relations with other social institutions. Comparison of health care systems in the U.S. and selected other nations. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

476. **SEMINAR IN SOCIOLOGICAL RESEARCH METHODS (4).**

- A. Survey Methods
- B. Experimental Methods
- D. Quantitative Methods
- E. Field Methods
- M. Multimethods
- N. Evaluation Research Methods

May be repeated to a maximum of 8 semester hours as topic changes. PRQ: SOCI 300; and STAT 208 or STAT 301. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

480. **COMMUNITIES AND CRIME (3).** Examination of various theories and empirical research regarding the community context of crime, criminality, and crime prevention. Consideration of related policy implications. A culminating experience integrating theory, methods, and scholarly writing is required. PRQ: SOCI 288, SOCI 300, SOCI 381. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

482. **SOCIOLOGY OF DEATH AND DYING (3).** Systematic study of the last stage of the life course from a sociological perspective. The social organization of dying and death across time and culture; in various institutional settings; as the result of social, political, and environmental factors; and as experienced by self and others, including the elderly and children. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

485. **LAW AND SOCIETY (3).** Law as a social institution, including the origins of law and its relationship to other social institutions, social control, and social change. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

487. **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. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300; and SOCI 288 or SOCI 357. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; 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. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 288, SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

490. **INDEPENDENT STUDY IN SOCIOLOGY (1-3).** 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. A culminating experience integrating theory, methods, and scholarly writing is required. PRQ: Consent of department.

492. **COMPARATIVE CRIMINOLOGY (3).** Historical and comparative analysis of crime and the criminal justice system in Europe, the United States, developing countries, and socialist societies. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 288, SOCI 289, SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

495. **PROSEMINAR IN SOCIOLOGY (3).** Selected topics in sociology introduced in response to timely events and/or circumstances or as specialized knowledge in a content area of the discipline. May be repeated to a maximum of 6 semester hours as the topic changes. A culminating experience—integrating theory, methods, and scholarly writing—is required. PRQ: SOCI 300. CRQ: SOCI 301 or SOCI 302; and SOCI 377A or SOCI 377B; or consent of department.

496X. **HISTORY AND SOCIAL SCIENCE INSTRUCTION FOR SECONDARY EDUCATORS (3).** *Crosslisted as ANTH 496X, ECON 496X, GEOG 496X, HIST 496, POLS 496X, and PSYC 496X.* Organization and presentation of materials for history and social science courses at the middle school, junior high, and senior high school secondary levels. PRQ: Admission to the history or social science secondary teacher certification education program and permission of the Department of History's office of secondary teacher certification education.

Sociology Faculty

Kirk Miller, Ph.D., North Carolina State University, associate professor, chair
 Abu B. Bah, Ph.D., New School for Social Research, associate professor
 Keri B. Burchfield, Ph.D., Pennsylvania State University, associate professor
 Charles L. Cappell, Ph.D., University of Chicago, associate professor
 Cassandra S. Crawford, Ph.D., University of California, San Francisco, assistant professor
 Michael Ezell, Ph.D., Duke University, associate professor
 Kerry O. Ferris, Ph.D., University of California at Los Angeles, associate professor
 Jeffrey Kidder, Ph.D., University of California, San Diego, assistant professor
 Fred E. Markowitz, Ph.D., State University of New York at Albany, associate professor
 Robin D. Moremen, Ph.D., Yale University, associate professor
 Kristen A. Myers, Ph.D., North Carolina State University, Presidential Teaching Professor
 Kristopher K. Robison, Ph.D., The Ohio State University, assistant professor
 Diane M. Rodgers, Ph.D., University of Missouri-Columbia, associate professor
 Shane Sharp, Ph.D., University of Wisconsin, assistant professor
 Carol Walther, Ph.D., Texas A&M University, assistant professor
 Simón E. Weffer, Ph.D., Stanford University, assistant professor

College of Visual and Performing Arts

Richard T. Holly, M.M., associate dean
Melanie Parks, M.F.A., acting 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 and Design

B.A. in art
 B.A. in art history
 B.F.A. in studio art
 B.S.Ed. in art and design 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

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

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 student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/provost/general-studies-bgs.pdf.

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.

Deans' List Criteria

The College of Visual and Performing Arts 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.

School of Art and Design (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 and Design 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 and Design 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 and Design 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 and Design Education (B.S.Ed.)

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

This major leads to a license to teach in the public schools of the state of Illinois.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (82)

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 282 - Introduction to World Art (3)
 ARTH 292 - Art and Design Since 1900 (3)
 ARTE 200 - Studio Foundations for Art and Design Educators (3)
 ARTE 342 - Introduction to Art and Design Education: Content and Clinical Experience at the Elementary Level (4)
 ARTE 343 - Digital Art Making and Teaching K-12 (3)
 ARTE 344 - Development of Resources and Methods in Art and Design Education: Content and Clinical Experience at the Middle Level (4)
 ARTE 345 - Art and Design Curriculum: Content and Clinical Experience at the High School Level (4)
 ARTE 387 - Assessing Art and Design Learning, K-12 (3)
 ARTE 463 - Art, Criticism and Communication in Education (3)
 ARTE 479 - Art for Special Needs Populations (3),
 OR SESE 457 - Methods for Including Middle and Secondary Students with Exceptionalities in the General Education Classroom (3)

ARTE 482 - Clinical Experiences in Studio Pedagogy (3)
 ARTE 488A - Student Teaching in Elementary Art (6)
 ARTE 488B - Student Teaching in Secondary Art (6)
 300- or 400-level art history course (3)

16 semester hours in the following three categories with no repetition of courses:

- One of the following pairs of courses (8)
 ARTS 300 - Intermediate Drawing (4), and ARTS 310 - Issues in Contemporary Drawing (4)
 ARTS 321 - Waterbased Painting I (4), and ARTS 324 - Painting II (4)
 ARTS 323 - Painting I (4), and ARTS 324 - Painting II (4)
 ARTS 327 - Illustration I (4), and ARTS 437 - Intermediate Illustration (4)
 ARTS 330 - Introduction to Printmaking (4), and ARTS 331 - Intermediate Printmaking: Lithography (4)
 ARTS 330 - Introduction to Printmaking (4), and ARTS 332 - Intermediate Printmaking: Intaglio and Relief (4)
 ARTS 330 - Introduction to Printmaking (4), and ARTS 333 - Intermediate Printmaking: Serigraphy (4)
 ARTS 341 - Beginning Ceramics (4), and ARTS 346A - Intermediate Hand-Building Ceramics (4)
 ARTS 341 - Beginning Ceramics (4), and ARTS 346 - Intermediate Ceramics (4)
 ARTS 351 - Beginning Metalwork and Jewelry (4), and ARTS 352 - Intermediate Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture I (4), and ARTS 362 - Intermediate Sculpture II (4)
 ARTD 313 - Beginning Photography (4), and ARTD 413 - Intermediate Traditional Photography (4)
- One of the following (4)
 ARTS 341 - Beginning Ceramics (4)
 ARTS 351 - Beginning Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture I (4)
- One of the following (4)
 ARTS 300 - Intermediate Drawing (4)
 ARTS 321 - Waterbased Painting I (4)
 ARTS 323 - Painting I (4)
 ARTS 327 - Illustration I (4)
 ARTS 330 - Introduction to Printmaking (4)
 ARTD 313 - Beginning Photography (4)

Requirements outside School (9)

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),
 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)

Special Requirements

Students must receive a grade of C or better in all major course requirements. Students must have a minimum 2.75 GPA in all NIU and transfer courses to enroll in Art Education courses. They must have a minimum 2.50 GPA in all NIU courses to obtain a educator licensure. These standards apply to all art education majors and initial licensure candidates.

Students who fall below a required GPA may appeal in writing for one probationary semester to the head of the art education division.

* 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 licensure program.

² 16 semester hours in the following three categories with no repetition of courses.

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 licensure 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 licensure program, students must successfully complete the Illinois Test for Academic Proficiency or achieve a Composite ACT Plus Writing score of at least 22; or a composite (mathematics and critical reading) SAT score of 1030 or pass 3 of the 4 TAP sections successfully with the final section taken and passed during the semester ARTE 200 is taken along with a TAP Workshop. TAP Prep Course is required for any student with a score of 19 or below on the ACT or 1030 on the SAT and the criminal background check required for licensure (prior to ARTE 342) for each clinical experience course, as well as, student teaching site as laid out per each sites rules and regulations, pass the entrance portfolio review, and have achieved a grade of at least C or better in ARTE 342. Also see "Educator Licensure Requirements."

Students are required to exhibit and maintain appropriate dispositions for licensure as assessed by the art education faculty.

Total Hours for a Major in Art Education: 91

Major in Art History (B.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (36)

ARTH 282 - Introduction to World Art (3)
 ARTH 292 - Art and Design Since 1900 (3)
 ARTH 294 - Art History Survey: Arts of Asia (3)
 ARTH 486 - Art Historical Methodology (3)
 ARTH 494 - Art History Undergraduate Seminar (3)
 At least one 300-level course from each of the following areas (12)
 Ancient, Middle Eastern, Medieval, and Early Modern Europe
 American, Modern, Contemporary, and Design
 Asian, African, Oceanian, Native American, Pre-Columbian, and Latin American
 One 400-level art history course (3)
 Electives in art history (6)

Required Cognate Courses (18-20)

In addition to a minimum of two courses, (6-8 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 (18-20).

Requirements outside School (0-12)

Fulfillment of B.A. foreign language requirement (0-12). (See "Foreign Language Requirement for the B.A. Degree" in the Other Graduation Requirements section of this catalog.)

University Electives (12-15)

Students must take 12-15 semester hours in any NIU course.

Total Hours for a Major in Art History: 66-81

Recommendation

Students who plan to enter graduate school should select French, German, Italian, or other appropriate foreign language, in consultation with an art history faculty adviser, to satisfy the B.A. foreign language requirement.

Degree with Department 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 art history division head 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 with a GPA of 3.00, and completion of a senior thesis. The foreign language must be chosen in consultation with an art history faculty adviser.

The senior thesis must be approved by a committee consisting of an Art History faculty adviser and a second reader.

To complete the senior thesis, students must complete: ARTH 486 - Art Historical Methodology (3) with a grade of A- or better followed by ARTH 499H - Senior Thesis (3).

Major in Art (B.A.)

The Bachelor of Arts (B.A.) in Art is a comprehensive degree that focuses on the study of art, design, and art history in the context of a broader program of general study.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (53)

ART 100 - Drawing Foundation I (3)
 ART 101 - Drawing Foundation II (3)
 ART 102 - 2-D Foundation (3)
 ART 103 - 3-D Foundation (3)
 ART 499 - Capstone Seminar (4)
 ARTS 200 - Beginning Life Drawing (3)
 ARTH 282 - Introduction to World Art (3)
 ARTH 292 - Art and Design Since 1900 (3)
 ART 499 - Capstone Seminar (4)
 Other art courses (28)

Requirements outside School (0-12)

Fulfillment of B.A. foreign language requirement (0-12).
 (See "Foreign Language Requirement for the B.A. Degree" in the Other Graduation Requirements section of this catalog.)

University Electives (15)

Students must take 15 semester hours in any NIU course.

Total Hours for a Major in Art (B.A.): 68-80

Major in Studio Art (B.F.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Design and Media Arts

Requirements in School (80-81)

ART 100 - Drawing Foundation I (3)
 ART 101 - Drawing Foundation II (3)
 ART 102 - 2-D Foundation (3)
 ART 103 - 3-D Foundation (3)
 ARTH 292 - Art and Design Since 1900 (3)

One of the following areas of study (62-63)

Time Arts (62)

ARTD 273 - Introduction to Time Arts I (4)
 ARTD 303 - Video Art (4)
 ARTD 313 - Beginning Photography (4)
 ARTD 350 - Sound (4)
 ARTD 370 - 2-D Animation (4)

ARTD 373 - 3-D Animation (4)
 ARTD 409 - Advanced Topics: Interactive Art (4)
 ARTD 466 - Intermedia Arts (4)
 ARTD 467 - Advanced Topics: Video Art (4)
 ARTD 473 - Advanced Topics: 3D Animation (4)
 ARTD 406 - Senior Project (4)
 ARTD 475 - Time Arts: Special Topics (4)
 Upper-division art studio electives (8)
 Art history electives (6)

Special requirements: After completion of ARTD 273 and ARTD 275, students must successfully complete a portfolio review in order to be retained in the time arts area of study.

Photography (62)

ARTD 303 - Video Art (4)
 ARTD 313 - Beginning Photography (4)
 ARTD 413 - Intermediate Traditional Photography (4)
 ARTD 419 - Intermediate Digital Photography (4)
 ARTD 468 - Advanced Photographic Media (16)
 ARTD 469 - Problems in Photography (8)
 ARTD 406 - Senior Project (4)
 ARTS 330 - Introduction to Printmaking (4)
 Upper-division art studio electives (8)
 Art history electives (6)

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 and Design at NIU.

Visual Communication (62)

ARTD 201 - Introduction to Visual Communication (4)
 ARTD 211 - Typography (4)
 ARTD 212 - Type and Image (4)
 ARTD 311 - Intermediate Visual Communication I (4), and ARTD 312 - Intermediate Visual Communication II (4)
 ARTD 318 - Interaction Design I (4)
 ARTD 319 - Interaction Design II (4)
 ARTD 405 - Professional Practices in Design (4)
 ARTD 411 - Advanced Visual Communication I (3) (4)
 ARTD 412 - Advanced Visual Communication II (4)
 ARTD 406 - Senior Project (4)
 Art studio electives (8)
 Art history electives (6)
 Course work from the following (4)
 ARTD 320 - Motion Graphic Design (4)
 ARTD 404 - Design Methodologies (4)
 ARTD 414 - Information Design (4)
 ARTD 418A - Special Problems in Visual Communication (4)
 ARTD 418B - Advanced Problems in Visual Communication (4)

Special requirements: The student must successfully complete a portfolio review after ARTD 201 and have a minimum GPA of 3.00 in ARTD 201, ARTD 211, and ARTD 212 to continue in the visual communication program.

Students must successfully complete a review of their senior project during ARTD 406.

Art electives should be chosen in consultation with faculty area advisor.

Total Hours for Emphasis 1, Design and Media Arts: 81

Emphasis 2. 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 (79-83)

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 282 - Introduction to World Art (3)
 ARTH 292 - Art and Design Since 1900 (3)

One of the following areas of study (58-62)

Drawing (58)

ARTS 300 - Intermediate Drawing (4)
 ARTS 310 - Issues in Contemporary Drawing (8)
 ARTS 323 - Painting I (4),
 OR ARTS 321 - Waterbased Painting I (4)
 ARTS 330 - Introduction to Printmaking (4)
 ARTS 400 - Advanced Drawing I (4)
 ARTS 402 - Advanced 2-D Figure Study (4)
 ARTS 403 - Drawing Workshop (4)
 ARTS 406 - Senior Project (4)
 Art studio electives with at least 8 semester hours of upper-division course work (12)
 3-D Studio elective (4)
 Art History electives (6)

Special requirement: The student must successfully complete a portfolio review in drawing after the following courses: ARTS 200 and ARTS 300.

Illustration (62)

ARTS 215 - Fundamentals of Graphic Design (4)
 ARTS 321 - Waterbased Painting I (4),
 OR ARTS 323 - Painting I (4)
 ARTS 327 - Beginning Illustration (4)
 ARTD 370 - 2-D Animation (4)
 ARTS 402 - Advanced 2-D Figure Study (4)
 ARTS 406 - Senior Project (4)
 ARTS 437 - Intermediate Illustration (8)
 ARTS 438 - Advanced Illustration (8)
 ARTS 447 - Computer Raster Applications for Illustration (4)
 ARTS 448 - Computer Vector Applications for Illustration (4)
 Art studio electives (8)
 Art history electives (6)

Special requirement: Successful completion of portfolio review after ARTS 327 to continue in the illustration area of study.

Painting (58)

ARTS 300 - Intermediate Drawing (4)
 ARTS 330 - Introduction to Printmaking (4)
 ARTS 406 - Senior Project (4)
 Art studio electives (12)
 Art history electives (6)
 ARTS 321 - Waterbased Painting I (4)
 ARTS 322 - Waterbased Painting II (4),
 OR ARTS 324 - Painting II (4)
 ARTS 323 - Painting I (4)
 ARTS 421 - Advanced Painting (16)

Special requirement: The student must successfully complete a portfolio review in painting after the following courses:

ARTS 321 - Waterbased Painting I (4)
 ARTS 323 - Painting I (4), and ARTS 322 - Waterbased Painting II (4),
 OR ARTS 324 - Painting II (4)

Printmaking (58)

ARTS 300 - Intermediate Drawing (4)
 ARTS 323 - Painting I (4)
 ARTS 330 - Introduction to Printmaking (4)
 ARTS 331 - Intermediate Printmaking: Lithography (4)
 ARTS 332 - Intermediate Printmaking: Intaglio and Relief (4)
 ARTS 333 - Intermediate Printmaking: Serigraphy (4)
 ARTS 406 - Senior Project (4)
 ARTS 430 - Advanced Printmaking Workshop (8)
 Art history electives (6)
 Art studio electives (12)
 3-D studio elective (4)

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, 2-D Studio: 81

Emphasis 3. 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 (79-80)

ART 100 - Drawing Foundation I (3)
 ART 101 - Drawing Foundation II (3)
 ART 102 - 2-D Foundation (3)
 ART 103 - 3-D Foundation (3)
 ARTH 282 - Introduction to World Art (3)
 ARTH 292 - Art and Design Since 1900 (3)

One of the following areas of study (61-62)

Ceramics (62)

ARTS 341 - Beginning Ceramics (4)
 ARTS 346 - Intermediate Ceramics (16)
 ARTS 351 - Beginning Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture I (4)
 ARTS 406 - Senior Project (4)
 ARTS 446 - Advanced Ceramics (16)
 Art history electives (6)
 Art studio electives (4)
 One of the following (4)
 ARTS 368 - Introduction to Fiber: Papermaking (4)
 ARTS 371 - 2-D/3-D Woven Construction (4)
 ARTS 372 - Introduction to Fiber: Print Dye Paint Stitch (4)
 ARTS 374 - Installation and Fiber Sculpture (4)

Special requirement: The student must successfully complete a portfolio review in ceramics after the following courses:

ARTS 341 - Beginning Ceramics (4)
 ARTS 346 - Intermediate Ceramics (4 or 8)

Fiber (62)

ARTS 330 - Introduction to Printmaking (4)
 ARTS 341 - Beginning Ceramics (4),
 OR ARTS 351 - Beginning Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture I (4)
 ARTS 368 - Introduction to Fiber: Papermaking (4)
 ARTS 371 - 2-D/3-D Woven Construction (4)
 ARTS 372 - Introduction to Fiber: Print Dye Paint Stitch (4)
 ARTS 374 - Installation and Fiber Sculpture (4)
 ARTS 406 - Senior Project (4)
 16 semester hours in any combination of the following courses.
 ARTS 470A - Intermediate/Advanced Fiber Studio: Weaving (4 or 8)
 ARTS 470B - Intermediate/Advanced Fiber Studio: Surface Exploration of Fabric (4 or 8)
 ARTS 470C - Intermediate/Advanced Fiber Studio: 3-D Forms in Fiber (4 or 8)
 ARTS 470D - Intermediate/Advanced Fiber Studio: Papermaking (4 or 8)
 Art studio electives (8)
 Art history electives (6)

Special requirement: Portfolio review after any two 300-level fiber courses to continue in the fibers area of study.

Metalwork and Jewelry (62)

ARTS 330 - Introduction to Printmaking (4),
 OR ARTD 313 - Beginning Photography (4)
 ARTS 341 - Beginning Ceramics (4)
 ARTS 351 - Beginning Metalwork and Jewelry (4)
 ARTS 352 - Intermediate Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture I (4)
 One of the following (4)
 ARTS 368 - Introduction to Fiber: Papermaking (4)
 ARTS 371 - 2-D/3-D Woven Construction (4)
 ARTS 372 - Introduction to Fiber: Print Dye Paint Stitch (4)
 ARTS 374 - Installation and Fiber Sculpture (4)
 ARTS 451 - Advanced Metalwork and Jewelry (16)
 ARTS 452 - Advanced Research in Metalwork and Jewelry (4)

ARTS 406 - Senior Project (4)
 Art history electives (6)
 Art studio electives (8)

Special requirement: Successful completion of a portfolio review in metalwork and jewelry after ARTS 351 and ARTS 352 to continue in this area of study.

Sculpture (62)

ARTS 341 - Beginning Ceramics (4)
 ARTS 351 - Beginning Metalwork and Jewelry (4)
 ARTS 361 - Beginning Sculpture (4)
 ARTS 362 - Intermediate Sculpture (12)
 ARTS 456 - Sculpture Workshop (4)
 ARTS 461 - Advanced Sculpture (12)
 ARTS 406 - Senior Project (4)
 Art history electives (6)
 300/400-level art studio elective (4)
 Art studio elective (4)
 Choose one of the following (4)
 ARTS 368 - Introduction to Fiber: Papermaking (4)
 ARTS 371 - 2-D/3-D Woven Construction (4)
 ARTS 372 - Introduction to Fiber: Print Dye Paint Stitch (4)
 ARTS 374 - Installation and Fiber Sculpture (4)

Special requirement: The student must successfully complete a sophomore portfolio review in sculpture after the following courses:

ARTS 361 - Beginning Sculpture (4)
 ARTS 362 - Intermediate Sculpture (4)

Total Hours for Emphasis 3, 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 292 - Art and Design Since 1900 (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 282 - Introduction to World Art (3)
 *ARTH 292 - Art and Design Since 1900 (3)
 Electives in art history (15)

Course List

The School of Art and Design 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 8 hours per semester requires consent of the School of Art and Design.

Foundations and General (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.

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.

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.

103. 3-D FOUNDATION (3). Intensive study of form and structure in three-dimensional space. Studio and lecture. PRQ: Art major or minor.

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.

106. ART MAKING, MATERIALS, AND METHODS FOR NON-ART MAJORS (3). Introduction to art skills and concepts through the production of two-dimensional works for non-art majors. Demonstrations and analyses of medium techniques and guided practice in the design, production, and appreciation of art works. Student-centered projects that emphasize individual development. May be repeated for a maximum of 6 semester hours.

108. BASIC DRAWING FOR NON-ART MAJORS (3). Introduction to drawing for non-art majors. Emphasis on descriptive and expressive means of representation. Study of the formal and expressive aspects of line and value, and traditional genres of art-making including portrait, landscape, still life, and narrative compositions with variety of wet and dry media.

450. FIELD STUDIES IN ART (1-12). 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.

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.

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.

489. TOPICS IN ART (1-8). 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.

490. INDEPENDENT RESEARCH (1-12). Work on individual problems in the student's major field. May be repeated to a maximum of 9 semester hours. PRQ: Consent of school.

499. CAPSTONE SEMINAR (4). Capstone seminar for students in the B.A. in Art program. Lecture, discussion and/or field experience. S/U grading.

Art Design (ARTD)

201. INTRODUCTION TO VISUAL COMMUNICATION (4). Introduces composition, typography, and historical and contemporary concepts about the evolving field of visual communication. Open to students intending to pursue the visual communication area of study. PRQ: Admission to the Visual Communication area of study. CRQ: ART 100 and ART 102.

211. TYPOGRAPHY (4). Study of typography its form, application, and role in culture. Exploration of typography as a primary medium of visual communication. PRQ: ART 201 and successful completion of visual communication review.

212. TYPE AND IMAGE (4). Study of the visual interrelationship of type and image, color theory, systems of organization in graphic design, and the conceptual aspects of communication. PRQ: ART 201 and successful completion of visual communication review.

215. DIGITAL PHOTOGRAPHY FOR NON-MAJORS (3). Introductory level digital photography class for non-majors. Focus on digital imaging techniques, emphasizing the use of the camera and computer as a creative tool. Essentials of digital photographic equipment and techniques as well as photographic image-making history, theory and practice. Instruction in how to shoot, edit, manipulate and critique photographs. A digital camera with manual focus and exposure controls is required.

273. INTRODUCTION TO TIME ARTS I (4). Introduction to methods and concepts of time-based media art. 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.

275. INTRODUCTION TO TIME ARTS II (4). Theory and application of time-art computer graphic technology in design and fine art with emphasis on interactivity. PRQ: ARTD 273, or consent of school.

302. COLOR (4). 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.

303. VIDEO ART (4). Concepts and techniques of video art.

311. INTERMEDIATE VISUAL COMMUNICATION I (4). Use of typography and imagery in the problem-solving processes in graphic design with emphasis on the development of conceptual skills. PRQ: ARTD 211 and ARTD 212.

312. INTERMEDIATE VISUAL COMMUNICATION II (4). Further work in graphic design with a focus on sequence and series in communication media. PRQ: ARTD 311 and ARTD 318.

313. BEGINNING PHOTOGRAPHY (4). 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 major or minor.

318. INTERACTION DESIGN I (4). Introduction to aspects of interaction design including usability, information architecture, graphic design in the interactive context, and the technical parameters of an interactive environment. CRQ: ARTD 311.

319. INTERACTION DESIGN II (4). Principles of prototyping, digital animation, and interaction, and the application of formal systems in design. PRQ: ARTD 318.

320. MOTION GRAPHIC DESIGN (4). Introduction to aspects of motion graphic design; history, aesthetic issues, and technical parameters of motion graphic development.

350. SOUND (4). Studies in the concepts of non-musical audio art with emphasis on combining audio with other media. PRQ: Successful completion of portfolio review or consent of school.

355. CRITICAL TOPICS IN ART AND TIME (4). Seminar on theoretical, social, and aesthetic issues in interactive and computer-based 4-D art. PRQ: Successful completion of portfolio review in any area in the School of Art and Design, or consent of school.

370. 2-D ANIMATION (4). Concepts and practice of animation with emphasis on computer-based 2-D animation. PRQ: Successful completion of portfolio review, or consent of school.

373. 3-D ANIMATION (4). Concepts and practices of 3-D modeling and animation. PRQ: ARTD 370, successful completion of portfolio review, or consent of school.

404. DESIGN METHODOLOGIES (4). Investigation and utilization of problem-solving strategies for the designer. PRQ: ARTD 311.

405. PROFESSIONAL PRACTICES IN DESIGN (4). 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: ARTD 212 or successful completion of review in the Design and Media Arts division, or consent of school.

406. SENIOR PROJECT (4). Professional practice in the student's area of study. Field experience, studio and/or lecture. Work completed to be presented as a capstone experience and skill of the student's major area of study. The course may be repeated only for students completing more than one Design emphasis in the School of Art and Design. S/U grading. PRQ: Senior standing.

409. ADVANCED TOPICS: INTERACTIVE ART (4). Interactive art with emphasis on structured and individual projects. May be repeated to a maximum of 12 semester hours. PRQ: Successful completion of portfolio review in time arts, or consent of school.

411. ADVANCED VISUAL COMMUNICATION I (4). Further work in design with emphasis on problem solving: exploration of signs and symbols resulting in visual identity systems, and analytical and creative approaches of designing specific publications. PRQ: ARTD 312.

412. ADVANCED VISUAL COMMUNICATION II (4). Advanced studies in the design of complex, content rich, publications, and interactive expressions of such publications; web design, and design expressed in series. PRQ: ART 411. CRQ: ARTD 406.

413. INTERMEDIATE TRADITIONAL PHOTOGRAPHY (4). 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 12 semester hours. PRQ: ARTD 313.

414. INFORMATION DESIGN (4). Introduction to the information design process, using symbol, typography, and imagery, with the goal of increasing understanding and access of information for the user. PRQ: ARTD 311.

418A. SPECIAL PROBLEMS IN VISUAL COMMUNICATION (4). Specific studies in related areas of visual communication. Topics announced. May be repeated to a maximum of 12 semester hours. PRQ: Successful completion of review in visual communication or consent of school.

418B. ADVANCED PROBLEMS IN VISUAL COMMUNICATION (4). Advanced studies in related areas of visual communication. Topics announced. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 312 or consent of school.

419. INTERMEDIATE DIGITAL PHOTOGRAPHY (4). Exploration of technical and aesthetic aspects of color digital photography as a contemporary art medium. Studio, lecture, and laboratory. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 313.

420. DESIGN FIELD EXPERIENCE (1-8).

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.

466. INTERMEDIA ARTS (4). Studies in art combining (mostly electronic) media, with emphasis on individual projects. Topics announced. May be repeated to a maximum of 12 semester hours. PRQ: Successful completion of portfolio review, or consent of school.

467. ADVANCED TOPICS: VIDEO ART (4). Studies in video art production with a focus on individual projects. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 303 or consent of school.

468. ADVANCED PHOTOGRAPHIC MEDIA (4). Advanced projects in photographic media. Topics announced. May be repeated for credit. PRQ: ARTD 413 or ART 419.

469. PROBLEMS IN PHOTOGRAPHY (4). Advanced individual work in photographic media with emphasis on experimentation and artistic expression. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 413 or ARTD 419.

473. ADVANCED TOPICS: 3D ANIMATION (4). Intensive work in animation using primarily 3-D techniques with emphasis on individual projects. May be repeated to a maximum of 12 semester hours. PRQ: ARTD 373 or consent of school.

475. TIME ARTS: SPECIAL TOPICS (4). Concentrated study in time arts and electronic media. Topics announced.

Art Education (ARTE)

109. STRATEGIC VISUAL THINKING (3) Investigation of the role of visual design in the presentation of quantitative information in order to promote vigorous dialogue around the interactions of complex data streams, and this fosters robust decision-making. Introduction to social science research through data collection, quantitative analysis, and interpretation as students complete their own original survey research.

200. STUDIO FOUNDATIONS FOR ART AND DESIGN EDUCATORS (3). Exploration of 2-D studio media appropriate for K-12 environment, studio pedagogy, and development of technical skills in the representation and interpretation of subjects. Portfolio preparation for art and design education pre-service teachers. Studio and lecture. PRQ: ART 100 and ART 103 and successful completion of the Test for Academic Proficiency or equivalent.

342. INTRODUCTION TO ART AND DESIGN EDUCATION: CONTENT AND CLINICAL EXPERIENCE AT THE ELEMENTARY LEVEL (4). Overview of the history of art education and its philosophical premises. Examination of policies and approaches to the teaching of art and design for young children. Study of developmental characteristics of the learner and strategies for differentiated learning. Introduction to practice in use of visual and textual instructional materials and construction of lesson plans based on content knowledge, studio pedagogy and student evidence. Directed observation and supervised participation with diverse populations in elementary-level 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 Academic Proficiency and the criminal background check required for licensure or a Composite ACT Plus Writing score of at least 22; or a composite (mathematics and critical reading) SAT score of 1030; ART 100, ART 101, ART 102, ART 103; ARTH 291 and ARTH 292; and minimum 2.75 cumulative GPA.

343. DIGITAL ART MAKING AND TEACHING K-12 (3). Specifically designed for pre-service art and design teachers to learn to make digital art for personal artistic development, to gain knowledge about teaching of digital art making, and management of digital technologies appropriate for K-12 setting. Emphasis on development of creativity, problem solving and technical knowledge. Students will collaboratively and critically interrogate digital images, digital art media, and digital visual culture environments as they simultaneously create them. CRQ: 342.

344. DEVELOPMENT OF RESOURCES AND METHODS IN ART AND DESIGN EDUCATION: CONTENT AND CLINICAL EXPERIENCE AT THE MIDDLE LEVEL (4). Experience with various art processes, tools, and media appropriate to differentiated learning at the middle level. Development and evaluation of the educational resources and methods, including visual, oral, and written instructional materials and techniques. Study and practice of cultural responsiveness with diverse middle-level populations. Development of and reflection on practice based on educational theory, content knowledge, and student evidence. Emphasis on lesson planning, teaching and professionalism. Directed observation and supervised participation with diverse populations in middle-level school settings for a minimum of 25 clock hours of clinical experience. Discussion, lecture, and studio. PRQ: ARTE 342 and admission to educator licensure, or consent of school.

345. ART AND DESIGN CURRICULUM: CONTENT AND CLINICAL EXPERIENCE AT THE HIGH SCHOOL LEVEL (4). Proficiency in sequential curriculum writing for art and design at the high school level with regards to student cognitive processes and curriculum goals, including culturally responsive, interdisciplinary and technological content. Proficiency in curriculum and instruction based on educational theory, content knowledge, studio pedagogy, and student evidence to ensure ongoing growth and achievement. Emphasis on differentiated instructional and assessment methods; teacher collaboration, advocacy and leadership. Directed observation and supervised participation with diverse populations with emphasis on high school settings for a minimum of 25 clock hours of clinical experience. Discussion, lecture, and studio. PRQ: ARTE 343, ARTE 344, ARTE 387, ARTE 463, ARTE 482, and admission to educator licensure, or consent of school.

383. TEACHING ART IN ELEMENTARY SCHOOLS (3). Objectives, procedures, resources, and activities related to art education for the culturally responsive and creative elementary classroom. Emphasis on content knowledge and student growth and achievement connected to self-motivation, emotional well-being and active engagement. Studio, lecture, and discussion. Limited to elementary education and special education majors, or consent of school.

387. ASSESSING ART AND DESIGN LEARNING K-12 (3). Techniques for assessing student art learning K-12. Assists prospective art teachers to construct appropriate formative and summative methods for the assessment of art learning based on individual and group visual and textual course work. Development of skills necessary for analysis of qualities found in traditional and electronic student art portfolios referenced against psychological and culturally based theories of artistic development. Analysis, development and use of qualitative and quantitative methods to monitor art and design learning and evaluate curriculum and instructional effectiveness. Strategies for data driven decision making based on reliable and valid judgments through rubric construction, visual benchmarking, and alternative moderation methods. Lecture, discussion and field experiences. PRQ: ARTE 342.

463. READING AND WRITING IN ART AND DESIGN EDUCATION: CRITICAL APPROACHES (3). Thematic, interdisciplinary, and culturally responsive approaches to the application of aesthetic, art historical, and critical theory and methods to instructional practice in elementary and secondary school and community settings. Emphasis on communication theory and the role of visual and textual language in teaching and learning. Development and use of multiple methods of communication and digital instructional resources to measure and improve student performance. Types of evidence of professional growth. Lecture, discussion, and field experiences. PRQ: 6 semester hours in art history survey and ARTE 342 for art education majors, and admission to educator licensure, or consent of school.

479. ART FOR SPECIAL NEEDS POPULATIONS (3). Philosophies, instructional methods, practice and experiences with appropriate materials, resources and opportunities related to art education with regards to special needs education, gifted, and diverse identities in order to support individualized planning, co-planning and instruction. Emphasis on laws and learning related to gifted and special education populations, interventions, and reporting. 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.

480. Alternative Teaching Experiences (3). 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.

482. CLINICAL EXPERIENCES IN STUDIO PEDAGOGY (3). Directed lesson planning for culturally responsive, differentiated instruction through supervised, collaborative teaching experiences for art education majors. Emphasis on co-planning, reflection, and the use of evidence-based instructional and assessment strategies for student achievement and interventions. Development of teacher leadership and family collaborations. Includes environment analysis for effective and healthy classroom management and instruction. Must include the Saturday 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 licensure, or consent of school. CRQ: ARTE 344.

483. ART IN ELEMENTARY SCHOOLS AND COMMUNITY PROGRAMS (3). Adapting visual arts content knowledge, lesson planning, and assessment strategies as appropriate to the elementary child in self-contained classrooms and community programs. Field trip, lecture, studio, critique, and microteaching experiences. Not open to art majors.

484. INTERRELATED ARTS EDUCATION (3). Exploration of aesthetic concepts, themes, and genres pertinent to education in across the arts. Analysis of curricular goals and structures appropriate for an education in combined arts and basic assumptions underlying these goals and structures. Planning, developing, implementing, and evaluating arts programs in the context of visual arts in K-12 educational systems.

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 and Design, art education area, and are subject to availability. (See "Educator Licensure Requirements.") PRQ: ARTE 345, final approval of portfolio, and successful completion of the Illinois Subject Matter Knowledge Test (Art K-12). CRQ: ARTE 488B.

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 and Design, art education area, and are subject to availability. (See "Educator Licensure 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)

282. INTRODUCTION TO WORLD ART (3). A global survey of practices in the visual arts from ancient times to the modern era.

292. ART AND DESIGN SINCE 1900 (3) Modern and contemporary art and design.

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

310. STUDIES IN ANCIENT AND MIDDLE-EASTERN ART (3).

- A. Egypt
- B. Mesopotamia
- C. Aegean Art
- D. Archaic and Classical Art
- E. Hellenistic Art
- F. Etruscan and Early Roman Art
- G. Roman Imperial Art
- H. Islamic Art
- I. Thematic Subjects

History, theory, and criticism of various aspects of ancient and Middle Eastern art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

320. STUDIES IN MEDIEVAL ART (3).

- A. Early Christian and Early Byzantine Art: 330-843
- B. Middle and Late Byzantine Art: ca. 843-1543
- C. Early Medieval Art: ca. 500-1000
- D. Romanesque and Gothic Art: ca. 1000-1400
- E. Thematic Subjects

History, theory, and criticism of various aspects of medieval art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

330. STUDIES IN EARLY MODERN EUROPEAN ART (3).

- A. Early Italian Renaissance Art
- B. Early Northern Renaissance Art
- C. 16th Century Italian Art
- D. 16th Century Northern European Art
- E. 17th and 18th Century European Art
- F. Thematic Subjects

History, theory, and criticism of various aspects of early modern art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

340. STUDIES IN MODERN AND AMERICAN ART (3).

- A. American Art before 1945
- B. Modernism in European and American Art
- C. Thematic Subjects

History, theory, and criticism of various aspects of modern and American art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

350. STUDIES IN CONTEMPORARY ART (3).

- A. 1960-1980
- B. 1980-present
- C. 1960-present
- D. Thematic Subjects

History, theory, and criticism of various aspects of contemporary art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

360. STUDIES IN DESIGN (3).

- A. Modern and Postmodern Architecture
- B. From Print Culture to New Media
- C. From Craft to Industry
- D. Sustainability
- E. Thematic Subjects

History, theory, and criticism of various aspects of design from the 19th century to the present. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

370. STUDIES IN ASIAN ART (3).

- A. Chinese Art
- B. Japanese Art
- C. South and Southeast Asian Art
- D. Southeast Asian Art
- E. Islamic Art
- F. Buddhist Art
- G. Thematic Subjects

History, theory, and criticism of various aspects of Asian art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

380. STUDIES IN AFRICAN, OCEANIAN, NATIVE AMERICAN, PRE-COLUMBIAN ART, AND LATIN-AMERICAN ART (3).

- A. Art of Africa, Oceania, and the Americas
- B. African Art
- C. Pre-Columbian Art
- D. Latin American Art
- E. Thematic Subjects

History, theory, and criticism of various aspects of African, Oceanian, Native American, Pre-Columbian, and Latin-American art. May be repeated with different subjects to a maximum of 12 semester hours. Multiple enrollments with different subjects are allowed in the same semester.

451. TOPICS IN ART HISTORY: ANCIENT AND MIDDLE-EASTERN ART (3). Various topics, such as Gender and Sexuality in Ancient Art, and Outsider Art, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

452. TOPICS IN ART HISTORY: MEDIEVAL ART (3). Various topics, including The Holy Image, the Art of Narrative in the Middle Ages, Imperial to Papal Rome, and the Art of the Medieval Book, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

453. TOPICS IN ART HISTORY: EARLY MODERN EUROPEAN ART (3). Various topics, such as Art and Science: Optics, Images, and Visual Propaganda, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

454. TOPICS IN ART HISTORY: MODERN AND AMERICAN ART (3). Various topics, such as The Duchamp Effect, Controversies in American Art, Modernist Groups, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

455. TOPICS IN ART HISTORY: CONTEMPORARY ART (3). Various topics, such as Photography as Art and Art as Photography, Globalization and Contemporary Art, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

456. TOPICS IN ART HISTORY: DESIGN (3). Various topics, such as Vienna 1900: Art and Culture at the Fin-de-Siècle, and Fashion-Modernism-Modernity, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

457. TOPICS IN ART HISTORY: ASIAN ART (3). Various topics such as, The Female in Japanese Art, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

458. TOPICS IN ART HISTORY: AFRICAN, OCEANIAN, NATIVE-AMERICAN, PRE-COLUMBIAN AND LATIN-AMERICAN ART (3). Various topics such as, Art, Ideology, and Empire: The Visual Culture of the Culhua-Mexica (Aztec) State, and Art and Architecture of the Ancient Maya, will be announced. May be repeated. Multiple enrollments are allowed in the same semester.

485. TOPICS IN ART HISTORY (3). Topics announced. May be repeated. Multiple enrollments are allowed in the same semester.

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.

494. ART HISTORY UNDERGRADUATE SEMINAR (3). Special problems in the analysis of art. Includes in-class presentation of research topic. Open only to upper-division students admitted to honors work in art history, art history majors, or by consent of instructor. Topics vary by instructor. May not be counted as University Honors program's Junior Honors Seminar by majors in School of Art and Design. PRQ: ARTH 486.

499. SENIOR THESIS (3) Independent research for students pursuing the Art History Degree with Honors or those currently admitted to the university honors program. PRQ: ARTH 486 with a grade of A- or better and senior status, or consent of school.

2-D and 3-D Studio (ARTS)

200. BEGINNING LIFE DRAWING (3). Study of the human figure through exercises in contour, modeling, and gesture drawing in a variety of media. May be repeated for a maximum of 6 credit hours.

215. FUNDAMENTALS OF GRAPHIC DESIGN (4). Introduction to the basic principles of graphic design. Studio and lecture. Not open to students pursuing the area of study in visual communications. PRQ: ART 101 and ART 102.

261. 3-D MATERIALS AND TECHNIQUES (4). 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.

300. INTERMEDIATE DRAWING (4). Opportunity to develop interpretive and representational skills through work in a variety of drawing media. PRQ: ART 101, ARTS 200.

310. ISSUES IN CONTEMPORARY DRAWING (4). Thematic investigation of contemporary issues in various media, including drawing, painting, 3D and 4D approaches. Rotating topics may include: Narrative Image, Abstraction, Political/Social Engagement, Globalism, Deconstructing Identity, The New Landscape, etc. May be repeated to a maximum of 8 semester hours. PRQ: Successful completion of portfolio review in any area in the School of Art and Design.

321. WATERBASED PAINTING I (4). Painting in various water-soluble media.

322. WATERBASED PAINTING II (4). Development of personal skills and techniques using water-soluble media. PRQ: ARTS 321.

323. PAINTING I (4). Development of the student's ability in painting with emphasis on ideas and materials.

324. PAINTING II (4). Further study of the processes and techniques of painting. PRQ: ARTS 323. CRQ: ARTS 321.

327. BEGINNING ILLUSTRATION (4). 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.

330. INTRODUCTION TO PRINTMAKING (4). 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.

331. INTERMEDIATE PRINTMAKING: LITHOGRAPHY (4). 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. Course may be repeated to a maximum of 12 credit hours. PRQ: ARTS 330.

332. INTERMEDIATE PRINTMAKING: INTAGLIO AND RELIEF (4). 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. Course may be repeated to a maximum of 12 credit hours. PRQ: ARTS 330.

333. INTERMEDIATE PRINTMAKING: SERIGRAPHY (4). 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. Course may be repeated to a maximum of 12 credit hours.

338. ANATOMICAL DRAWING (4). Sketches and finished drawings executed from cadavers. Research through pictorial resources required regarding muscle origins and insertions, organs, and the internal skeletal structure.

339. BEGINNING SCIENTIFIC ILLUSTRATION (4). Introduction to basic scientific representational drawing with emphasis on the biological sciences. PRQ: ARTS 200.

340. INTERMEDIATE SCIENTIFIC ILLUSTRATION (4). Continuation of ARTS 339 with introduction to painting techniques with emphasis on zoological science. PRQ: ARTS 339.

341. BEGINNING CERAMICS (4). Introduction to ceramics using basic hand-building and wheel-throwing techniques for the exploration of form, texture, and glaze applications. Studio and lecture.

346. INTERMEDIATE CERAMICS (4 OR 8). Exploration of form and texture through individually assigned problems using hand-building or wheel-throwing techniques. Laboratory experience in clay and glaze testing, studio clay mixing, and kiln firing. Studio and lecture. May be repeated to a maximum of 16 semester hours. PRQ: ARTS 341 or consent of school.

347. TECHNICAL STUDY IN CERAMICS (4). 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.

351. BEGINNING METALWORK AND JEWELRY (4). Introduction to jewelry with emphasis on basic fabrication techniques. Studio and lecture. PRQ: ART 100 and ART 103, or consent of school.

352. INTERMEDIATE METALWORK AND JEWELRY (4). 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.

361. BEGINNING SCULPTURE I (4). 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.

362. INTERMEDIATE SCULPTURE (4). Continuation of and progression from ARTS 361. Studio, lecture, and readings. May be repeated to a maximum of 12 semester hours. PRQ: ARTS 361.

368. INTRODUCTION TO FIBER: PAPERMAKING (4). 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.

371. 2-D/3-D WOVEN CONSTRUCTION (4). Exploration of a range of techniques for making 2- and 3-dimensional work. Technical information includes pattern and pictorial weaving, textile dyeing/printing/painting, and 3-D woven construction processes. Experimentation with traditional and experimental materials. Exploration of unique conceptual principles of textiles: sculptural potential of fabric construction, meaning and metaphors of material, narrative capacity of cloth.

372. INTRODUCTION TO FIBER: PRINT DYE PAINT STITCH (4). 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.

374. INSTALLATION AND FIBER SCULPTURE (4) Exploration of materials and processes for creating installation work and three-dimensional forms in the fiber tradition. Wrapping, coiling, knotting, looping, and sculptural fabric techniques will be explored. The concept of installation includes relationships of objects and site-specific work, and will examine a range of spaces. Concepts are developed through research, readings, material investigations, and developments of three-dimensional studies. When taught in the spring semester, the class will focus on object construction; in fall semester, the focus is directed to installation concepts and working in a range of public and private spaces.

400. ADVANCED DRAWING I (4). Intensive studio work in perceptual and conceptual problems using a variety of media. PRQ: ARTS 300 and successful completion of portfolio review in any area in the School of Art and Design, or consent of school. May be repeated to a maximum of 8 semester hours.

402. ADVANCED 2-D FIGURE STUDY (4). 2-D studio work emphasizing the expressive use of the figurative motif. May be repeated to a maximum of 8 semester hours. PRQ: ARTS 321 or ARTS 323, and successful completion of portfolio review in any area in the School of Art and Design; or consent of school.

403. DRAWING WORKSHOP (4). 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 8 semester hours. PRQ: Successful completion of portfolio review in any area in the School of Art and Design or consent of school.

406. SENIOR PROJECT (4). Professional practice in the student's area of study. Field experience, studio and/or lecture. S/U grading. May be repeated to a maximum of 6 semester hours only for students completing more than one Fine Arts emphasis in the School of Art and Design. PRQ: Senior standing.

421. **ADVANCED PAINTING** (4 or 8). Individually selected studio problems in painting. May be taken concurrently with one other section of ARTS 421. May be repeated. PRQ: Successful completion of portfolio review in painting.

423. **SELECTED PROBLEMS IN STUDIO ART** (4). 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.

425. **ATELIER PAINTING** (4). 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 323, or consent of school.

430. **ADVANCED PRINTMAKING WORKSHOP** (4 or 8). Emphasis on developing individual skills and a body of work utilizing the medium. May be repeated. PRQ: ARTS 331 or ARTS 332 or ARTS 333.

436. **SELECTED PROBLEMS IN ILLUSTRATION** (4). Emphasis on contemporary problems of illustration theory, using current illustration materials, equipment, and techniques. Topics announced. May be repeated.

437. **INTERMEDIATE ILLUSTRATION** (4). Introduction to traditional color materials and techniques and their application to the different major areas of illustration. Emphasis on developing creative problem-solving skills to effectively communicate ideas and concepts. May be repeated to a maximum of 8 semester hours. PRQ: ARTS 327 and successful completion of portfolio review in Illustration.

438. **ADVANCED ILLUSTRATION** (4). Intensive studio work with emphasis on contemporary problems of illustration using current illustration media and techniques. In conjunction with the instructor, students select an area of focus, i.e., advertising, editorial, or book. May be repeated to a maximum of 8 semester hours. PRQ: ARTS 437.

439. **ADVANCED SCIENTIFIC ILLUSTRATION I** (4). 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.

440. **ADVANCED SCIENTIFIC ILLUSTRATION II** (4). 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.

446. **ADVANCED CERAMICS** (4 or 8). 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 346, or consent of school.

447. **COMPUTER RASTER APPLICATIONS FOR ILLUSTRATION** (4). 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: ARTS 215 and ARTS 437.

448. **COMPUTER VECTOR APPLICATIONS FOR ILLUSTRATION** (4). 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: ARTS 215 and ARTS 437.

451. **ADVANCED METALWORK AND JEWELRY** (4 or 8). Intensive studio work in individually assigned techniques and processes. May be repeated.

452. **ADVANCED RESEARCH IN METALWORK AND JEWELRY** (4 or 8). Studio research on specific techniques or processes selected in conference with instructor. Written or oral report required. May be repeated. PRQ: ARTS 451 and pass portfolio review in metalwork and jewelry.

456. **SCULPTURE WORKSHOP** (4). Intensive study of one sculpture concepts and process. Focus varies, using contemporary sculpture trends in concept and materials. May be repeated to a maximum of 12 semester hours. PRQ: ARTS 361 and ARTS 362.

461. **ADVANCED SCULPTURE** (4). 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. May be repeated to a maximum of 16 semester hours. PRQ: ARTS 362.

470. **ADVANCED FIBER WORKSHOP** (4 or 8). Individual exploration in any area of fiber curriculum with emphasis on the development of personal themes. Exploration across fiber curriculum to create integrated body of work. Studio projects, development of artist's statement and documentation of work in slides. Studio, lecture, readings, and discussion. May be repeated to a maximum of 36 semester hours.

471. **SPECIAL TOPICS IN FIBER** (4 or 8). Emphasis on specific topics or processes within the fiber curriculum. Special topics include Artist Books, Japanese Papermaking, T-Shirt, Body Boundaries, Garment as Metaphor, and others. May be repeated to maximum of 36 semester hours.

Art and Design Faculty

Douglas G. Boughton, Ph.D., University of Alberta (Canada), professor, director

Leif Allmendinger, M.F.A., Rhode Island School of Design, associate professor

Michael Barnes, M.F.A., University of Iowa, professor

Sinclair Bell, Ph.D., University of Edinburgh, associate professor

Karen Brown, M.F.A., California State University at Fullerton, associate professor

Todd Buck, M.S.M.E., University of Illinois, Chicago, associate professor

Sarah Evans, Ph.D., University of California, Berkeley, assistant professor

Kerry Freedman, Ph.D., University of Wisconsin, professor

Billie Giese, M.F.A., University of Kansas, associate 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

Rebecca Houze, Ph.D., University of Chicago, associate 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

Yih-Wen Kuo, M.F.A., Southern Illinois University, professor

Andrew Liccardo, M.F.A., Texas Tech University, associate professor

Christine LoFaso, M.F.A., School of the Art Institute of Chicago, professor

Li-Fen Lu, Ph.D., Indiana University, assistant professor

Kimberly Martens, M.S.M.E., University of Illinois, Chicago, associate professor

Helen Nagata, Ph.D., Stanford University, associate professor

Ashley Nason, M.F.A., University of Tennessee, associate 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

Nina Rizzo, M.F.A., University of Texas, Austin, associate professor

Charlotte Rollman, M.F.A., University of Illinois, professor

Kurt Schultz, M.F.A., Northern Illinois University, associate professor

Lee Sido, M.F.A., Northern Illinois University, associate professor, assistant director

Kryssi Staikidis, Ph.D., Columbia University, New York, associate professor

Frank Trankina, M.F.A., School of the Art Institute of Chicago, associate professor

Ann van Dijk, Ph.D., Johns Hopkins University, associate professor

Shei-Chau Wang, Ed.D., Northern Illinois University, associate professor

Harry J. Wirth, B.S., University of Wisconsin, Milwaukee, professor

School of Music (MU--)

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.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Core Requirements (20-21)

MUSC 99 - Recital Attendance (0)
 MUTC 101, and MUTC 102 - Music Theory I and II (4)
 MUTC 103, and MUTC 104 - Aural Skills I and II (2)
 MUTC 201, and MUTC 202 - Music Theory III and IV (4)
 MUTC 203 and MUTC 204 - Aural Skills III and IV (2)
 (Students in the jazz studies area of study must substitute MUSP 203 and MUSP 204, Aural Foundations of Improvisation I and II (2), for MUTC 203 and MUTC 204.)
 MUTC 301 - Music Theory V (2),
 OR MUHL 323 - 20th Century Music (3)
 MUHL 321, and MUHL 322 - History and Literature of Music I and II (6)

Emphasis 1. Music Education

Requirements in School (83-86)

Core requirements (26)
 MUED 150 - Introduction to Music Education/Field Experience in Public Schools (1)
 MUED 250 - Elementary General Music Methods (3)
 MUED 251 - Clinical Experience in Elementary General Music (1)
 MUED 350 - Middle School/Junior High Music Methods (3)
 MUED 351 - Clinical Experience In Middle School/Junior High Music (1)
 MUED 352 - Secondary Music Methods (3)
 MUED 353 - Clinical Experience in Secondary Music (1)
 MUED 490¹ - Student Teaching K-8 (6)
 MUED 495¹ - Student Teaching 6-12 Music (6)

One of the following areas of study (37-39)

Instrumental Music (37-38)

MUSP 101² - Piano: Secondary: Beginning Group (1)
 MUSP 102² - Piano: Intermediate Group (1)
 MUED 170 - Instrumental Techniques and Materials: Flute, Clarinet, and Saxophone (1)
 MUED 171 - Instrumental Techniques and Materials: Brass (1)
 MUED 172 - Instrumental Techniques and Materials: Percussion (1)
 MUED 173 - Instrumental Techniques and Materials: Double Reeds (1)
 MUED 174 - Instrumental Techniques and Materials: Strings (1)
 MUTC 305 - Orchestration (2),
 OR MUTC 307 - Wind and Percussion Scoring (2)
 MUSP 335 - Conducting I (2)
 MUSP 336 - Conducting II: Instrumental (2),
 OR MUSP 337 - Conducting III: Choral (2)
 MUSE 342 - University Chorus (1),
 OR MUSP 114 - Voice: Secondary (1)
 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)
 Instrumental Ensemble (1)
 MUSE 335³ - Marching Band (1)
 Other ensemble courses (1)
 Course work from the following (1)
 MUSE 315 - String Ensemble (1)
 MUSE 316 - Woodwind Ensemble (1)
 MUSE 317 - Brass Ensemble (1)
 MUSE 318 - Percussion Ensembles (1)
 MUSE 319 - Guitar Ensemble (1)
 MUSE 320 - Keyboard Ensemble (1)
 MUSE 321 - Mixed Ensemble (1)
 MUSE 322 - New Music Ensemble (1)
 MUSE 323 - Early Music Ensemble (1)
 MUSE 324 - Jazz Combo (1)
 MUSE 325 - Latin Jazz Ensemble (1)
 Course work from the following (4-5)
 MUSE 330 - Wind Symphony (1)
 MUSE 331 - Wind Ensemble (1)
 MUSE 332 - All-University Band (1)
 MUSE 335³ - Marching Band (1)
 MUSE 360 - NIU Philharmonic (1),
 OR MUSE 365 - Campus String Orchestral (1)
 MUSC 399A - Senior Recital (0)

¹ Application for student teaching must be made through the School of Music during the academic year which precedes registration in student teaching.

² MUSP 110 - Piano Secondary, 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.

Vocal Music (37-38)

MUSP 101¹ - Piano: Secondary: Beginning Group (1)
 MUSP 102¹ - Piano: Secondary: Intermediate Group (1)
 MUSP 103¹ - Piano: Secondary: Advanced Group (2)
 MUSP 205 - Diction for Singers I (2)
 MUSP 206 - Diction for Singers II (2)
 MUSP 214 - Voice: Primary (8)
 MUTC 305 - Orchestration (2),
 OR MUTC 307 - Wind and Percussion Scoring (2)
 MUSP 314 - Voice: Primary (6)
 MUSP 335 - Conducting I (2)
 MUSP 337 - Conducting III: Choral (2)
 Theory and composition and/or history and Literature courses (2-3)
 Ensembles (7)
 Course work from the following (5)
 Vocal Ensemble (1)
 MUSE 342 - University Chorus (1)
 MUSE 345 - Concert Choir (1)
 Other ensemble courses (2)
 MUSC 399A - Senior Recital (0)

Requirements outside School

*EPFE 201 - Education as an Agent for Change (3),
 OR *BKST 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)
 SESE 457 - Methods for Including Middle and Secondary Students
 with Exceptionalities in the General Education Classroom (3)
 Fulfillment of requirements for Standard Special Educator
 Licensure (See the "Educator Licensure 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 MUED 250 and MUED 350 and MUED 352 and MUED 490 and a grade of C or better is required for successful completion of MUED 150 and MUED 250 and MUED 350 and MUED 352 and MUED 490. 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 MUED 150 and MUED 250 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 MUED 250. Following full admission, students falling below the required cumulative GPA will not be permitted to continue in the educator licensure 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)
 MUSP 335 - Conducting I (2)
 MUSP 339 - Accompanying (1)
 MUHL 435 and MUHL 436 - Organ Literature I and II (4),
 OR MUHL 437 and MUSL 438 - Piano Literature I and II (4)
 Theory and composition courses (2-3)
 History and literature courses (2-3)

Ensembles (8)
 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 (MUSP 232) with a grade of C or better or pass a keyboard skills proficiency examination. Requirements for students whose primary keyboard instrument is harpsichord are MUHL 437, Piano Literature I (2), and other music courses (9).

Vocal Music (58-60)

MUSP 101¹ - Piano: Secondary: Beginning Group (1)
 MUSP 102¹ - Piano: Secondary: Intermediate Group (1)
 MUSP 103¹ - Piano: Secondary: Advanced Group (2)
 MUSP 214 - Voice: Primary (16)
 MUSP 205 and MUSP 202 - Diction for Singers I and II (4)
 MUSP 314 - Voice: Primary (16)
 MUSP 355 - Conducting I (2)
 Theory and composition courses (2-3)
 History and literature courses (2-3)
 Ensembles (12)
 Course work from the following (6)
 MUSE 342 - University Chorus (1)
 MUSE 345 - 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)
 MUSP 101¹ - Piano: Secondary: Beginning Group (1)
 MUSP 102¹ - Piano: Secondary: Intermediate Group (1)
 MUTC 305 - Orchestration (2),
 OR MUTC 307 - Wind and Percussion Scoring (2)
 MUSP 335 - Conducting I (2)
 MUSP 336 - Conducting II: Instrumental (2)
 Theory and composition courses (2-3)
 History and literature courses (2-3)
 Other music courses (2)
 Ensembles (12)
 Course work from the following (7)
 Instrumental Ensemble (1)
 University Bands (1)
 Orchestra (1)
 Other ensemble courses (4)
 MUSC 399A - Senior Recital (0)

Note: Requirements for students whose primary interest is guitar are ensembles (8); MUHL 439 - Guitar Literature (2); MUSP 107 - Guitar Skills I (1); 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)
 MUSP 105¹ - Piano: Secondary: Level 1 Group Jazz Piano (1)
 MUSP 106¹ - Piano: Secondary: Level 2 Group Jazz Piano (1)
 MUTC 205 - Jazz Theory (2)
 MUHL 230 - Jazz Literature (2)
 MUSP 160 - Introduction to Jazz Studies (2)

* Available for general education credit.

¹ MUSP 110 - Piano Secondary, may be substituted for any group piano requirement with the consent of the piano faculty.

MUTC 309 - Jazz Arranging I (2)
 MUTC 310 - Jazz Arranging II (2)
 MUSP 335 - Conducting I (2)
 MUSP 332 and MUSP 333 - Jazz Improvisation I and II (4)
 MUED 477 - Jazz Pedagogy (3)

Course work from the following (4-5)

MUTC 211 - Electronic and Computer Music I (2)
 MUTC 400 - Recording Techniques (3)
 MUSP 462 - Survey of the Music Industry (2)

A world music course (3)

Other music courses (2-3)

Ensembles (12)

MUSE 330 - Wind Symphony,
 OR MUSE 331 - Wind Ensemble (1),
 OR MUSE 322 - All University Band (1),
 OR MUSE 360 - NIU Philharmonic (1),
 OR MUSE 365 - Campus String Orchestra (4)
 MUSE 324 - Jazz Combo (1),
 OR MUSE 350 - Jazz Ensemble (6)

Other ensembles (2)

MUSC 399A - Senior Recital (0)

Note: Ensemble requirements for students whose primary instrument is keyboard are MUSE 324 - Jazz Combo, OR MUSE 350 Jazz Ensemble (6) and MUSE 342 - University Chorus, OR MUSE 345 - Concert Choir (2) and 1 or 2 of the following: MUSE 370, MUSE 371, or MUSE 372 (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 MUSP 107, Guitar Skills I (2) and MUSP 108, Guitar Improvisation I (2) and MUSP 207, Guitar Skills II (2) and MUSP 208, Guitar Improvisation II (2) and MUSP 319, Guitar: Primary (6) and MUSE 319, Guitar Ensemble (4) and MUSE 324, Jazz Combo, OR MUSE 350, Jazz Ensemble (6) and MUSE 342, University Chorus, OR MUSE 345, 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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (46-48)

MUSC 99 - Recital Attendance (0)

MUTC 101 and MUTC 102 - Music Theory I and II (4)

MUTC 103 and MUTC 104 - Aural Skills I and II (2)

MUTC 201 and MUTC 202 - Music Theory III and IV (4)

MUTC 203 and MUTC 204 - Aural Skills III and IV (2)

MUTC 301 - Music Theory V (2),

OR MUHL 323 - 20th Century Music (3)

MUHL 321 and MUHL 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 390, recording techniques MUSC 390, performance MUSP 463, and a variety of areas within the music industry MUSP 463. 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 MUSP 462, Survey of the Music Industry.

Course List

General (MUSC)

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.

390. INTERNSHIP IN MUSIC (2-8).

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.

399A. SENIOR RECITAL (0). Preparation and performance of a full or half recital in accordance with current School of Music guidelines. S/U grading. 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. S/U grading. PRQ: Consent of school.

Music History and Literature (MUHL)

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 MUTC 102 and MUTC 104.

320. MUSIC HISTORY REVIEW (3). Development of Western art music from the Medieval through the Romantic periods. Review course. Does not satisfy graduate music history requirements for any degree program. Credit earned does not count toward the M.M. degree or Performer's Certificate. Students must earn a grade of C or higher in order to satisfy the deficiency for this course. Open only to M.M. students.

321. HISTORY AND LITERATURE OF MUSIC I (3). Development of music in the Western world the Middle Ages to 1750. Examines composers' lives and styles as well as social, political, and cultural developments that have affected music history. PRQ: Grade of C or better in MUTC 202.

322. HISTORY AND LITERATURE OF MUSIC II (3). Development of music in the Western world from. Examines composers' lives and styles as well as social, political, and cultural developments that have affected music history. PRQ: Grade of C or better in MUTC 202.

323. 20TH CENTURY MUSIC (3). Survey of European and American music from impressionism to the present. PRQ: Grade of C or better in MUTC 202, and grade of C or better in either MUTC 204 or MUSP 204..

326. SURVEY OF WORLD MUSIC (3). *Crosslisted as ANTH 326X*. Survey of traditional music (both folk and classical/court) in world cultures. Examination of the relationship of music to selected aspects of the people and culture of East, South, Central and Southeast Asia, Australia, Polynesia, the Middle East, Europe, Africa, the Caribbean, and Latin America.

337. CHAMBER MUSIC LITERATURE (3). Chamber music from the baroque to the present day. PRQ: Consent of school.

398. SELECTED STUDIES IN MUSIC: MUSIC HISTORY AND LITERATURE (1-4). Independent or small group study of selected topics of interest or need in music. May be repeated to a maximum of 6 semester hours. S/U grading. 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: MUHL 326, 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: MUHL 230.

426. AMERICAN MUSIC (3). Survey of art music from colonial times to today; popular song from the early 1800s to ca. 1960; and the Broadway musical from its origins to ca. 1980. PRQ: MUHL 322.

430. SEMINAR IN MUSIC HISTORY AND LITERATURE (3). Research and analysis in selected areas of music history and literature. Topics announced. May be repeated to a maximum of 6 semester hours.

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: MUSP 310 or consent of school.

438. PIANO LITERATURE II (2). Survey of romantic and contemporary piano literature. CRQ: MUSP 310 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 MUTC 202, and grade of C or better in either MUTC 204 or MUSP 267.

Music Theory and Composition (MUTC)

101. MUSIC THEORY I (2). Introductory study of music theory from fundamentals to diatonic harmony. PRQ: Consent of school. CRQ: MUTC 103.

102. MUSIC THEORY II (2). Continuation of MUSC 101. Study of diatonic harmony, with emphasis on analysis of tonal music. PRQ: Grade of C or better in MUTC 101.

103. AURAL SKILLS I (1). Development of proficiency in eartraining and sightsinging. Introductory studies in moveable *do* solfege. Open only to music majors. PRQ: Consent of school. CRQ: MUTC 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 MUTC 103.

200. COMPOSITION: SECONDARY (1). Introductory studies in the techniques of composing for acoustic media. May be repeated. PRQ: Consent of school.

201. MUSIC THEORY III (2). Continuation of MUSC 102. Study of chromatic harmony, with emphasis on analysis of tonal music. PRQ: Grade of C or better in MUTC 102 and MUTC 104. CRQ: MUTC 203.

202. MUSIC THEORY IV (2). Continuation of MUSC 201. Application of prior studies to analysis of formal design in tonal music. PRQ: Grade of C or better in MUTC 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 MUTC 102 and MUTC 104. CRQ: MUTC 201.

204. AURAL SKILLS IV (1). Continuation of MUSP 203. Development of proficiency in eartraining and sightsinging. Studies in moveable *do* solfege. PRQ: Grade of C or better in MUTC 203.

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: MUTC 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 MUTC 211. Emphasis on implementing techniques studies thus far in more extensive electronic music compositions. PRQ: MUSC 211.

300. COMPOSITION: PRIMARY (4). Individualized study in composing for acoustic media. May be repeated. PRQ: Grade of C or better in MUTC 202, grade of C or better in either MUSP 204 or MUTC 267, and consent of school.

301. MUSIC THEORY V (2). 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 MUTC 202, and grade of C or better in MUTC 204 or MUSP 204.

305. ORCHESTRATION (2). Basic techniques of arranging music for orchestras and small ensembles. PRQ: Grade of C or better in MUTC 202, and grade of C or better in MUTC 204 or MUSP 204.

307. WIND AND PERCUSSION SCORING (2). Comprehensive course in scoring for wind and percussion ensembles. PRQ: Grade of C or better in MUTC 202, and grade of C or better in MUTC 204 or MUSP 204.

308. CHORAL ARRANGING (2). Comprehensive course in scoring for vocal ensembles. PRQ: Grade of C or better in MUTC 202, and grade of C or better in either MUTC 204 or MUSP 204.

309. JAZZ ARRANGING I (2). Scoring techniques for jazz and popular ensembles. PRQ: Grade of C or better in MUTC 202, MUTC 205, and grade of C or better in MUTC 204 or MUSP 204; or consent of school.

310. JAZZ ARRANGING II (2). Continuation of MUSC 309. Advanced scoring techniques for jazz and popular ensembles. PRQ: MUTC 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: MUTC 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: MUTC 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.

398. SELECTED STUDIES IN MUSIC: MUSIC THEORY (1-4). Independent or small group study of selected topics of interest or need in music other than composition. May be repeated to a total of 6 semester hours. S/U grading. 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: MUTC 400.

402. MUSIC THEORY REVIEW (3). Review of harmony, analytical techniques, and listening strategies necessary for graduate-level study of music theory. Does not satisfy any graduate music theory requirements for any degree program. Credit earned does not count toward the M.M. degree or Performer's Certificate. Students must earn a grade of C or higher in order to satisfy the deficiency for this course. Open only M.M. students.

404. SEMINAR IN MUSIC THEORY AND COMPOSITION (3). Research and analysis in selected areas of music theory and composition. Topics announced. May be repeated to a maximum of 6 semester hours.

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.

Music Performance (MUSP)

101. BEGINNING GROUP PIANO (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school

102. INTERMEDIATE GROUP PIANO (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school.

103. ADVANCED GROUP PIANO (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school.

105. LEVEL 1 GROUP JAZZ PIANO (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school.

106. LEVEL 2 GROUP JAZZ PIANO (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school.

107. GUITAR SKILLS I (1). Development of guitar skills through the study of various musical styles. Emphasis on chordal guitar playing. May be repeated.

108. GUITAR IMPROVISATION I (1). Development of guitar skills through the study of single-note improvisation. May be repeated.

110. PIANO SECONDARY (1). Emphasis on performance, with proficiency requirements at each level. May be repeated with consent of school. PRQ: Consent of school.

111. ORGAN: SECONDARY (1)

112. HARPSICHORD: SECONDARY (1)

113. HARP: SECONDARY (1)

114. VOICE: SECONDARY (1). CRQ: MUSE 342 or MUSE 345.

115. VIOLIN: SECONDARY (1)

116. VIOLA: SECONDARY (1)

117. VIOLONCELLO: SECONDARY (1)

118. CONTRABASS: SECONDARY (1)

119. GUITAR: SECONDARY (1)

120. FLUTE: SECONDARY (1)

121. OBOE: SECONDARY (1)

122. CLARINET: SECONDARY (1)

123. SAXOPHONE: SECONDARY (1)

124. BASSOON: SECONDARY (1)

125. TRUMPET: SECONDARY (1)

126. FRENCH HORN: SECONDARY (1)

127. TROMBONE: SECONDARY (1)

128. TUBA AND EUPHONIUM: SECONDARY (1)

129. 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.

130. STEELPAN: 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.

160. 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.

203. 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 MUTC 104.

204. AURAL FOUNDATIONS OF IMPROVISATION II (1). Continuation of MUSP 203. Further development of skills in melody memorization, aural transposition, chord recognition, and solo etudes. PRQ: Grade of C or better in MUSP 203.

205. 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.

206. 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 MUSP 205.

207. GUITAR SKILLS II (1). Continuation of MUSP 107. Emphasis on the study of chordal jazz accompaniment and improvisation. May be repeated. PRQ: MUSP 107 or consent of school.

208. GUITAR IMPROVISATION II (1). Continuation of MUSP 108. Emphasis on the development of standard jazz repertoire. May be repeated. PRQ: MUSP 108 or consent of school.

210. PIANO: PRIMARY (1-4). Keyboard students only.

211. ORGAN: PRIMARY (1-4). Keyboard students only.

212. HARPSICORD: PRIMARY (1-4). Keyboard students only.

213. HARP: PRIMARY (1-4). Harp 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 for students in the performance emphasis. May be repeated.

214. VOICE: PRIMARY (1-4). 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 for students in the performance emphasis. May be repeated. CRQ: MUSE 342 or MUSE 345.

215. VIOLIN: PRIMARY (1-4). CRQ: MUSE 360.

216. VIOLA: PRIMARY (1-4). CRQ: MUSE 360.

217. VIOLONCELLO: PRIMARY (1-4). 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. CRQ: MUSE 360.

218. CONTRABASS: PRIMARY (1-4). 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. CRQ: MUSE 330, or MUSE 331, or MUSE 350, or MUSE 360.

219. GUITAR: PRIMARY (1-4). 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 for students in the performance emphasis (B.M.). 1 semester hours' credit in section 1 plus 1 semester hours' credit in section 2 for students pursuing B.M. music education plus B.M. in jazz performance. May be repeated.

220. FLUTE: PRIMARY (1-4)

221. OBOE: PRIMARY (1-4)

222. CLARINET: PRIMARY (1-4)

223. SAXOPHONE: PRIMARY (1-4)

224. BASSOON: PRIMARY (1-4)

225. TRUMPET: PRIMARY (1-4)

226. FRENCH HORN: PRIMARY (1-4)

227. TROMBONE: PRIMARY (1-4)

228. TUBA AND EUPHONIUM: PRIMARY (1-4)

229. PERCUSSION: PRIMARY (1-4).

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. CRQ: MUSE 330 OR MUSE 331 OR MUSE 350 OR MUSE 360.

230. STEELPAN: PRIMARY (1-4). 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 for students in the performance emphasis B.M. May be repeated.

232. ADVANCED KEYBOARD SKILLS (2). Development of keyboard proficiency in sight-reading, score-reading, and ensemble playing. May be repeated.

310. PIANO: PRIMARY (2 or 4). Keyboard students only.

311. ORGAN: PRIMARY (2 or 4). Keyboard students only.

312. HARPSICORD: PRIMARY (2 or 4). Keyboard students only.

313. HARP: PRIMARY (2 or 4). Harp students only.

314. VOICE: PRIMARY (2 or 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 for students in the performance emphasis. May be repeated. PRQ: Consent of school. CRQ: MUSP 205 or MUSP 206 and MUSE 342 or MUSE 345

315. VIOLIN: PRIMARY (2 or 4). CRQ: MUSE 360.

316. VIOLA: PRIMARY (2 or 4). CRQ: MUSE 360.

317. VIOLONCELLO: 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 for students in the B.M. performance emphasis. May be repeated. CRQ: MUSE 360.

318. CONTRABASS: PRIMARY (2 or 4).

319. GUITAR: PRIMARY (2 or 4)

320. FLUTE: PRIMARY (2 or 4)

321. OBOE: PRIMARY (2 or 4)

322. CLARINET: PRIMARY (2 or 4)

323. SAXOPHONE: PRIMARY (2 or 4)

324. BASSOON: PRIMARY (2 or 4)

325. TRUMPET: PRIMARY (2 or 4)

326. FRENCH HORN: PRIMARY (2 or 4)

327. TROMBONE: PRIMARY (2 or 4)

328. TUBA AND EUPHONIUM: PRIMARY (2 or 4)

329. 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. CRQ: MUSE 330 OR MUSE 331 OR MUSE 335 OR MUSE 350 OR MUSE 360.

330. STEELPAN: 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.

331. 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.

332. JAZZ IMPROVISATION I PRQ: Grade of C or better in MUSP 105 and MUSP 106, or MUSP 210 (jazz section), and grade of C or better in MUSP 160 and MUSP 204.

333. JAZZ IMPROVISATION II (2). Continuation of MUSC 367A. Extensive study of improvisational techniques. Solo study, transcriptions, listening assignments, aural and theoretical development. PRQ: MUSP 332.

335. CONDUCTING I (2). Basic principles and techniques of conducting. PRQ: Grade of C or better in MUTC 202, and grade of C or better in MUTC 204 or MUSP 204; or consent of school.

336. CONDUCTING II: INSTRUMENTAL (2). Conducting principles and techniques as applied to instrumental ensembles. PRQ: MUSP 335.

337. CONDUCTING III: CHORAL (2). Conducting principles and techniques as applied to vocal ensembles. PRQ: MUSP 335.

339. 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.

340. AFRICAN INSTRUMENTS (1). 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. C. African Instruments.

341. CARIBBEAN INSTRUMENTS (1). 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.

342. RENAISSANCE AND BAROQUE INSTRUMENTS (1). 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.

343. INDIAN INSTRUMENTS (1). 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.

344. AFRO-CUBAN PERCUSSION INSTRUMENTS (1). 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.

398. SELECTED STUDIES IN MUSIC: MUSIC EDUCATION (1-4). Independent or small group study. May be repeated to a maximum of 6 semester hours. S/U grading. 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 (2-8).

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.

Ensembles (MUSE)

Vocal Ensemble

340. WOMEN'S CHORUS (1). A non-auditioned treble voice choral ensemble performing repertoire of music composed for treble voices from Western and Non-Western choral music traditions, specially commissioned new music, and music of women composers. This course is for non-voice majors. May be repeated.

341. CHAMBER CHOIR (1). 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 MUSP 214 may not concurrently register for MUSE 341 without the permission of the MUSP 214 instructor.

342. UNIVERSITY CHORUS (1). Open to all students proficient in singing and interested in choral activities. May be repeated.

343. OPERA THEATRE (1). 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 MUSP 214 may not concurrently register for MUSE 343 without the permission of the MUSP 214 instructor.

344 JAZZVOX (1). 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 MUSP 214 may not concurrently register for MUSC 344 without the permission of the MUSP 214 instructor.

345. CONCERT CHOIR (1). Study and performance of musical masterworks from the 16th through the 20th century. May be repeated.

Instrumental Ensemble

315. STRING ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

316. WOODWIND ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

317. BRASS ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

318. PERCUSSION ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

319. GUITAR ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

320. KEYBOARD ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

321. MIXED ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated. Students can enroll in more than one section in a term.

322. NEW MUSIC ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

323. EARLY MUSIC ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

324. JAZZ COMBO (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

325. LATIN JAZZ ENSEMBLE (1). Ensemble performance. Participation for credit in more than one ensemble during the same semester permitted. May be repeated.

350. JAZZ ENSEMBLE (1). Study and performance of the various styles of jazz and popular music. May be repeated.

University Bands

330. WIND SYMPHONY (1). Open to all university students proficient in the playing of wind and percussion instruments. Participation in both MUSE 330 and MUSE 331 during the same semester permitted. May be repeated.

331. WIND ENSEMBLE (1). Open to all university students proficient in the playing of wind and percussion instruments. Participation in both MUSE 330 and MUSE 331 during the same semester permitted. May be repeated.

332. ALL-UNIVERSITY BAND (1). 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.

Huskie Bands

335. MARCHING BAND (1). Open to all university students. Participation in both MUSE 335 and MUSE 336 during the same semester permitted. May be repeated.

336. PEP BAND (1). Open to all university students. Participation in both MUSE 335 and MUSE 336 during the same semester permitted. May be repeated.

Orchestra

360. NIU PHILHARMONIC (1). Open to all qualified students. May be repeated.

365. CAMPUS STRING ORCHESTRA (1). Open to all qualified students. May be repeated.

World Music Ensemble

370. GAMELAN(I). 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.

371. AFRICAN ENSEMBLE (1). 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.

372. STEEL BAND (1). 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.

373. ALL UNIVERSITY STEEL BAND (1). 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.

374. TABLA (I). 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.

375. CHINESE MUSIC ENSEMBLE (1). Introduction to Chinese music through various repertoires: the traditional Silk and Bamboo Ensemble of the South Bank of Yang Zi River (Jiang Nan Si Zhu), narrative singing genres, such as Peking opera, Nan-guan, and Mountain and Lyric songs, and the modern Chinese orchestral and instrumental compositions. Traditional philosophical perspectives of and western influences on Chinese music through various performance opportunities. Open to non-majors by special consent of the School of Music.

Music Education (MUED)

150. 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.

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.

250. ELEMENTARY GENERAL MUSIC METHODS (3). Music materials, learning experiences, and teaching techniques for the general music program in the elementary school. PRQ: Grade of C or better in MUTC 102, and MUTC 104 and MUED 150; CRQ: MUED 251.

251. CLINICAL EXPERIENCE IN ELEMENTARY GENERAL MUSIC (1). Directed observation and supervised participation in elementary school general music classes. 30 hours are required for completion of requirement. PRQ: Grade of C or better in MUTC 102 and MUTC 104, and MUED 150; minimum NIU cumulative GPA of 2.50; and successful completion of the ILTS Basic Skills Test. S/U grading. CRQ: MUED 225.

350. MIDDLE SCHOOL/JUNIOR HIGH MUSIC METHODS (3). Music materials, learning experiences, and teaching techniques for the general music and ensemble music program in the middle school and junior high school. PRQ: Grade of C or better in MUED 250; minimum NIU cumulative GPA of 2.50; and admission to educator licensure program; or consent of school. CRQ: MUED 350.

351. CLINICAL EXPERIENCE IN MIDDLE SCHOOL/JUNIOR HIGH MUSIC (1). Directed observation and supervised participation in middle school and junior high general music classes, instrumental and/or vocal music performance classes. 30 hours are required for completion of requirement. S/U grading. PRQ: Grade of C or better in MUTC 202 and MUTC 204 and MUED 250, minimum NIU cumulative GPA of 2.50; completion of MUED 251; and admission to educator licensure program. CRQ: MUED 350 or consent of instructor.

352. SECONDARY MUSIC METHODS (3). 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. PRQ: Grade of C or better in MUTC 202; and grade of C or better in MUTC 204 or MUSP 204; MUSP 335 or MUSE 350; MUSC 371; minimum NIU cumulative GPA of 2.50; and admission to educator licensure program. For students in the instrumental music area of study, a grade of C or better in four of the following MUED 170, MUED 171, MUED 172 or MUED 173 or MUED 174; or consent of school. CRQ: MUED 351.

353. CLINICAL EXPERIENCE IN SECONDARY MUSIC (1). Directed observation and supervised participation in middle school and junior high general music classes, instrumental, and/or vocal music performance classes. 30 hours are required for completion of requirement. S/U grading. PRQ: Grade of C or better in MUTC 202, MUTC 204, MUSP 335, and MUED 350; minimum NIU cumulative GPA of 2.50; completion of MUED 351; and admission to educator licensure program. For students in the instrumental music area of study, a grade of C or better in four of the following: MUED 170, MUED 171, MUED 172, MUED 173, MUED 174. CRQ: MUED 352 or consent of instructor.

360. 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.

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.

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.

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: MUSP 314.

398. INDEPENDENT OR SMALL GROUP STUDY (1-4). May be repeated to a maximum of 6 semester hours. S/U grading. 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: MUED 350 and MUED 352, or 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 MUTC 202 and MUED 250 and MUTC 204 or MUSP 204.

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: MUED 350.

485. WORLD MUSIC PEDAGOGY (3). Overview of teaching world music in various settings: K-12 general music classes and ensembles and music appreciation classes and world music ensembles in higher education. Specific focus on the rationale and approaches of integrating world music into such settings. Designed primarily for (but not limited to) music education students who have prior knowledge of world music and seek to apply their knowledge in educational settings and/or performance majors (of western classical music) who would like to expand their musical horizon and improve their pedagogical skills. Limited to music majors.

489. SEMINAR IN MUSIC EDUCATION (3). Research and analysis in selected areas of music education. Topics announced. May be repeated to a maximum of 6 semester hours.

490. STUDENT TEACHING K-8 (6). Exit student teaching experience at the elementary or middle school level, including general music experience, for half of one semester. Placements arranged through 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 MUED 250 and MUED 350 and MUED 352 and fulfillment of educator licensure requirement.

495. STUDENT TEACHING 6-12 MUSIC. (6). Exit student teaching experience at the secondary level, including conducting instrumental or vocal (non-general) music ensemble, for half of one semester. Placements arranged through 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 MUED 250 and MUED 350 and MUED 352, and fulfillment of educator licensure requirements.

Music Faculty

Paul Bauer, D.M., Northwestern University, professor, director
Orna Arania, D.M.A., Northwestern University, associate professor
Gregory Barrett, D.Mus., Indiana University, professor
Gregory Beyer, D.M.A., Manhattan School of Music, associate professor
Thomas Bough, D.M.A., Arizona State University, associate professor
Geof Bradfield, M.F.A. California Institute of the Arts, assistant professor
James Russell Brown, M.M., New England Conservatory, applied artist
Ronald Carter, M.A., University of Illinois, professor, Board of Trustees Professor
Ricardo Castañeda, M.M., Northwestern University, applied artist
Robert Chappell, M.M., University of North Texas, Visiting Professor
Glenda Cosenza, D.M.A., Temple University, associate professor
Arthur Davis, M.M., University of Illinois, applied artist
Anthony Devroye, Performance Diploma, Curtis Institute of Music, assistant professor
Mary Lynn Doherty, Ph.D., University of Wisconsin, associate professor
John Fairfield, M.M., Northwestern University, visiting 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, professor
Brian Hart, Ph.D., Indiana University, professor
Janet Hathaway, Ph.D., New York University, associate professor
John E. Hatmaker, Ph.D., University of Iowa, instructor
Richard T. Holly, M.M., East Carolina University, professor
Eric Johnson, D.M.A., University of Illinois, professor
JeongSoo Kim, D.M.A., New England Conservatory, associate professor
Edward Klonoski, Ph.D., Ohio State University, associate professor
William Koehler, D.M.A., University of Texas, Austin, Visiting Professor
Cheng-Hou Lee, M.M., Rice University, assistant professor
Blaise Magniere, M.M., Cleveland Institute of Music, assistant professor
David Maki, D.M.A., University of Michigan, associate professor
Lucia Matos, D.M.A., University of Iowa, assistant professor
Peter Middleton, M.A., University of California, professor
Michael Mixtacki, M.M., Indiana University, instructor
Ann Montzka, M.M., Northern Illinois University, applied artist
Richard Moore, M.M., Northern Illinois University, instructor

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, professor
Amy Rhodes, Certificate of Performance, Northwestern University, applied artist
Charles Schuchat, B.M., Northwestern University, associate professor
Faye Seeman, M.M., Boston University, applied artist
Kelly Sill, B.A., University of Illinois, applied artist
Robert L. Sims, Artistic Diploma, Northwestern University, professor
Mathias J. Tacke, Diploma, Northwest German Music Academy, professor
Liam Teague, M.M., Northern Illinois University, associate professor
Rodrigo Villanueva, M.M., University of North Texas, associate professor
Jui-Ching Wang, M.M., Northern Illinois University, assistant professor
Marie Wang, M.M., Northern Illinois University, assistant professor
Ronnie Wooten, D.M.A., Michigan State University, professor

School of Theatre and Dance (THEA, TH-D)

Admission to the B.F.A. emphasizes 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 enrolled in theatre and dance classes are required to participate in at least one production every semester. This must be accomplished by successfully completing one of the following: THEA 235A, THEA 255A, THEA 366, THEA 395, or TH-D 377.

Majors and minors are required to attend all productions offered by the School of Theatre and Dance during any semester for which they are enrolled in a theatre and dance class.

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 (12)

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 366 - House Management and Publicity (1)

Major in Theatre Studies (B.A.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Requirements in School (62)

Theatre Arts Core (12)

THEA 214 - Introduction to Performance (3)
 THEA 215 - Fundamentals of Storytelling (3)
 THEA 220 - Introduction to Design (3)
 THEA 300 - Script Analysis (3)
 THEA 312 - Directing I (3)
 THEA 370 - History of Theatre and Drama I (3)
 THEA 371 - History of Theatre and Drama II (3)
 THEA 395 - Performance and Production (3)

THEA 412 - Directing II (3)
 THEA 466 - The Business of Theatre (2)
 THEA 492 - Senior Research Project (3),
 OR THEA 495 - Internship in Theatre Arts (3)
 Course work from the following (15)
 THEA 216 - Acting I: Performing Skills (3)
 THEA 313 - Stage Management (3)
 THEA 316 - Acting II: Technique Development (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 419 - Performance (1-3)
 THEA 465 - Managing the Performing Arts (3)
 THEA 475 - Contemporary Theatre (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 495 - Internship in Theatre Arts (6)
 THEA 497 - Tutorial in Theatre (1-3)
 TH-D 205 - Dance Techniques I (1)
 TH-D 207 - Dance Techniques II (1)
 TH-D 286 - Rhythmic Analysis, Improvisation, and Composition (3)
 TH-D 330 - Theatre Dance (2)
 Electives outside of school by advisement

Requirements outside School (0-12)

Fulfillment of B.A. foreign language requirement (0-12)
 (See "Foreign Language Requirement for the B.A. Degree")

Special Requirements

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 fourth 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 2.75 GPA in all theatre courses; successfully pass a portfolio review of work achieved in theatre, and complete either THEA 492, Senior Research Project, or THEA 495, Internship in Theatre Arts to reflect academic and artistic excellence prior to graduation.

Students pursuing the Major in Theatre Studies (B.A.) must complete two semesters of THEA 395C, Design/Technology/Stage Management as part of the three semester hours of THEA 395 required for the degree.

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.

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

Emphasis 1. Acting

Requirements in School (81)

Theatre Arts Core (12)

TH-D 205 - Dance Techniques I (2)
 TH-D 330 - Theatre Dance (2)
 THEA 214 - Introduction to Performance (3)
 THEA 300 - Script Analysis (3)
 THEA 308 - Acting Technique (3)
 THEA 309 - Voice for the Stage (4)
 THEA 310 - Acting Technique: Emotional Preparation (3)
 THEA 311 - Movement for the Stage (4)
 THEA 312 - Directing I (3)
 THEA 370 - History of Theatre and Drama I (3)
 THEA 371 - History of Theatre and Drama II (3)
 THEA 395 - Performance and Production (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 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 (6)
 Electives by advisement (4)
 Select from the following courses (3)
 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.

Students pursuing the B.F.A., Emphasis 1. Acting must complete one semester of THEA 395C Design/Technology/Stage management as part of the three semester hours of THEA 395 required for the degree.

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 (12)

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 395 - Performance and Production (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 435 - Pattern Development (3)
 THEA 436 - Millinery and Accessories (3)
 THEA 437 - Dyeing and Fabric Modification for the Theatre (3)
 THEA 449 - Design and Technology (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 Requirements

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 spring 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.

Students pursuing the B.F.A. Emphasis 2. Design and Technology must complete three semester hours of THEA 395C, Design/Technology/Stage Management in production areas 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 (74)

Theatre arts core (12)

KNDN 475 - History of Dance: 18th Century to Modern Times (3)
 THEA 110 - Fundamentals of Acting for the Non-Major (3)
 THEA 395C - Performance and Production (1)
 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)
 TH-D 377 - Dance Performance (4)

Course work from the following (22)

- TH-D 205 - Dance Techniques I (1)
- TH-D 207 - Dance Techniques II (1)
- TH-D 305 - Ballet III (1)
- TH-D 306 - Modern Dance III (1)
- TH-D 405 - Ballet IV (1)
- TH-D 406 - Modern Dance IV (1)

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 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 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 World Art (3)
- *KNPE 100 - Scientific Basis of Human Activity (3)
- MUHL 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.

Students pursuing the B.F.A. in Emphasis 3. Dance Performance must complete one semester of THEA 395C, Design/Technology/Stage Management. Students in dance performance are required to enroll in TH-D 377, Dance Performance, every term.

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.

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 377 - Dance Performance (2)

Course work from the following (10)

- TH-D 205 - Dance Techniques I (1)
- TH-D 207 - Dance Techniques II (1)
- TH-D 305 - Ballet III (1)
- TH-D 306 - Modern Dance III (1)
- TH-D 405 - Ballet IV (1)
- TH-D 406 - Modern Dance IV (1)

Course work from the following (7)

- KNDN 214 - Folk and Square Dance (1)
- KNDN 369 - African Heritage Dance (2)
- TH-D 286 - Rhythmic Analysis, Improvisation and Composition (3)
- TH-D 308 - Pointe 1 (1)
- TH-D 320 - Male Ballet Technique (1)
- TH-D 330 - Theatre Dance (2)
- TH-D 361 - Jazz Technique, (2)
- TH-D 388 - Choreography (2)

TH-D 408 - Pointe 11 (1)

TH-D 409 - Pas de Deux (2)

TH-D 477 - Special Studies in Dance (1)

TH-D 496 - Tutorial in Dance (1-3)

Minor in Theatre Studies (25-28)

THEA 110 - Fundamentals of Acting for the Non-Major (3)

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 300 - Script Analysis (3)

THEA 395 - Performance and Production (2)

One of the following (3)

THEA 370 - History of Theatre and Drama I (3)

THEA 371 - History of Theatre and Drama II (3)

THEA 475 - Contemporary Theatre (3)

Electives in Theatre Arts (3-6)

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 313 - Stage Management (3)

THEA 466 - The Business of Theatre (2)

THEA 481 - Playwriting I (3)

THEA 491 - Topics in Theatrical Performance (3)

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.

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 (3). 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 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 analysis, and vocal expression and projection. May be repeated to a maximum of 6 semester hours. PRQ: THEA 214 or consent of school. CRQ: THEA 308 and THEA 311.

310. ACTING TECHNIQUE: EMOTIONAL PREPARATION (3). 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 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.

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.

366. HOUSE MANAGEMENT AND PUBLICITY (1). Practicum in house management. Principles and procedures of house management as practiced in performing arts venues. Students will be assigned complete responsibilities of house management for one school event and/or production. PRQ: School of Theatre and Dance major or minor 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 300 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).

A. Acting Directing/Dramaturgy

C. Design/Technology/Stage Management

Practicum experience in production areas of theatre: acting, directing, dance, dramaturgy, design, technology, and theatre management. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 2 semester hours per semester. 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 or consent of school.

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. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 2 semester hours per semester. 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 (2-3).**

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 (1-3).** 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.

435. **PATTERN DEVELOPMENT (3).** An overview of patternmaking techniques for the theatre. Explores different patternmaking techniques including: flat patterning, drafting systems, draping and primitive ethnic patterning (based on geometry and simple shapes). PRQ: THEA 335 or consent of school.

436. **MILLINERY AND ACCESSORIES (3).** Exploration of millinery techniques including blocked felt, constructed buckram, straw and soft hats. Projects will have emphasis on both historical and theatrical interpretations of the techniques. PRQ: THEA 235.

437. **DYEING AND FABRIC MODIFICATION FOR THE THEATRE (3).** Introduction to a variety of dyeing, painting and surface design techniques applicable to use on the stage. Considers techniques as well as products and the implications of both for costume design and construction. PRQ: THEA 335 or consent of school.

449. **DESIGN AND TECHNOLOGY (1-3).** 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. May be repeated to a maximum of 6 hours. 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. May be repeated to a maximum of 6 hours. 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. May be repeated to a maximum of 6 hours. PRQ: THEA 249 and THEA 355, or consent of school.

463. **PROFESSIONAL DEVELOPMENT FOR THE ACTOR (3).** Preparing students to become professional actors whether in theatre, film, and/or television. Actors will develop a portfolio based on their character type and castability.

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 (1-3).** 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 300, or consent of school.

476. THEATRE HISTORY (1-3). Seminar in special periods of theatre history. Open to students who are prepared for advanced and specialized study. Topics to be announced in advance. Concurrent enrollment in multiple sections or topics is permissible to a maximum of 6 semester hours per semester. 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 Egyptian through contemporary as it relates to theatrical production. Exploration of period clothing and manners, decor.

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 (1-3). 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. Concurrent enrollment in multiple sections or topics is permissible to a maximum of 3 semester hours per semester. May be repeated to a maximum of 9 semester hours. PRQ: Consent of school.

491. TOPICS IN THEATRICAL PERFORMANCE (1-6). Intensive investigation of a single dramatic form or theatrical phenomenon with emphasis on performance. Topics announced. Concurrent enrollment in multiple sections or topics is permissible to a maximum of 6 semester hours per semester. 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 (1-9). Off-campus experience opportunities with selected organizations in theatre or related areas. Limited to qualified students. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 9 semester hours per semester. Students must take this course for a minimum of 3 semester hours. May be repeated to a maximum of 9 semester hours. S/U grading may be used. PRQ: Consent of school.

497. TUTORIAL IN THEATRE (1-3). Directed study and research in special areas of theatre arts. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 6 semester hours per semester. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

498H. HONORS TUTORIAL IN THEATRE (1-3). Directed study and research in special areas of theatre arts. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 6 semester hours per semester. May be repeated to a maximum of 6 semester hours. PRQ: Consent of school.

Dance Performance (TH-D)

205. DANCE TECHNIQUES I (1). Basic performance techniques in contemporary dance including fundamentals of ballet and modern dance. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 2 semester hours per semester. May be repeated to a maximum of 8 semester hours. PRQ: Consent of school.

207. DANCE TECHNIQUES II (1). Techniques for performance in contemporary dance including ballet and modern. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 2 semester hours per semester. Proficiency requirement. May be repeated to a maximum of 8 credit 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 preplanning 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). Study of the performance techniques in ballet at the intermediate level. Concurrent enrollment in multiple sections is permissible with a maximum of 2 semester hours per semester. May be repeated to a maximum of 24 semester hours. Proficiency requirement.

306. MODERN DANCE III (1). Study of the performance techniques in modern dance at the intermediate level. Concurrent enrollment in multiple sections is permissible with a maximum of 2 semester hours per semester. May be repeated to a maximum of 24 credit hours. Proficiency requirement.

308. POINTE I (1). Elementary pointe techniques. May be repeated to a maximum of 12 semester hours. CRQ: TH-D 305 or TH-D 405.

320. MALE BALLET TECHNIQUES (1). Specialized exercises and extended ballet vocabulary. May be repeated to a maximum of 12 semester hours. CRQ: TH-D 305 or TH-D 405.

330. THEATRE DANCE (2).

A. Ballroom

B. Preclassic

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. Concurrent enrollment in multiple sections and topics is permissible with a maximum of 4 semester hours per semester. 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.

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 8 semester hours.

377. DANCE PERFORMANCE (1). Practicum experience in dance performance. May be repeated. PRQ: School of Theatre and Dance major or minor or consent of school.

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). Concentration on complex ballet techniques for performance. Concurrent enrollment in multiple sections is permissible with a maximum of 2 semester hours per semester. May be repeated to a maximum of 24 credit hours. Proficiency requirement

406. MODERN DANCE IV (1). Concentration on complex modern dance techniques for performance. Emphasis on movement quality and interpretative performance elements. Concurrent enrollment in multiple sections is permissible with a maximum of 2 semester hours per semester. May be repeated to a maximum of 24 credit hours. Proficiency requirement.

408. POINTE II (1). Advanced pointe techniques. May be repeated to a maximum of 12 semester hours. Proficiency requirement. CRQ: TH-D 405.

409. PAS DE DEUX (2). Partnering techniques and principles in classical ballet. May be repeated to a maximum of 12 semester hours. Proficiency requirement. 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.

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).

- 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. Concurrent enrollment in multiple sections or topics is permissible with a maximum of 6 semester hours per semester. May be repeated to a maximum of 24 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 (1-3). Directed individual study in special areas of dance. Concurrent enrollment in multiple sections is permissible with a maximum of 5 semester hours per semester. 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, professor
 Brian Chung, M.F.A., New York University, assistant professor
 Stanton Davis, M.F.A., University of Delaware, associate professor

Paula Frasz, M.F.A., University of Illinois, professor
 Kathryn Gately-Poole, M.F.A., Mason Gross School of the Arts, professor emeritus

Lori Hartenhoff, M.F.A., University of Wisconsin, associate professor

Luke Krueger, M.F.A., Arizona State University, instructor
 Ryan Massie, M.F.A., Northern Illinois University, instructor

Terrence McClellan, M.F.A., University of Massachusetts, professor

Tracy Nunnally, M.F.A., Florida State University, associate professor

Melanie Parks, M.F.A., University of Illinois, associate professor
 Richard Poole, M.F.A., Rutgers University, associate professor

Patricia L. Ridge, Ph.D., University of Colorado, Boulder, professor
 Deborah Robertson, M.F.A., Smith College, professor

Sahin Sahinoglu, M.F.A., Northern Illinois University, associate professor

Robert Schneider, D.F.A., Yale University, associate professor
 Patricia Skarbinski, M.F.A., Northern Illinois University, assistant professor

Brandon Wardell, M.F.A., Northwestern University, assistant professor

Inter-College Interdisciplinary Certificates and Programs

Major in Applied Management (B.S.)

The student learning outcomes for this degree are located at www.niu.edu/assessment/clearinghouse/outcomes/index.shtml.

General Information

Admission to the major is limited to students holding an A.A.S. degree in a discipline directly related to one of the program emphases. All majors must meet NIU's requirements for general education (29-41 hours), complete a minimum of 40 hours of course work at the 300-400 level, and earn a minimum of 30 hours at NIU. Up to 30 hours of proficiency credit can be applied toward the 120-credit-hour university graduation requirements with the approval of the department adviser and chair. The completion of a culminating experience (e.g., senior seminar, capstone course or project, or internship, etc.) is required for all majors.

Core Requirements (21)

ACCY 288 - Fundamentals of Accounting (3)
FINA 320 - Principles of Finance (3)
MGMT 333 - Principles of Management (3)
MGMT 346 - Business Communication (3)
MGMT 412 - Business Law (3)
MKTG 310 - Principles of Marketing (3)
OMIS 338 - Principles of Operations Management (3)

Emphasis 1. Computer Science (28-29)

Required Courses (25)

CSCI 330 - UNIX and Network Programming (4)
CSCI 340 - Data Structures and Algorithm Analysis (4)
CSCI 466 - Databases (4)
CSCI 467 - Introduction to Software Engineering (4)
CSCI 475 - Web Development (3)
One of the following (3)
CSCI 350 - Computer Security Basics (3)
CSCI 490Q - Computer Security (3)
One of the following (3)
CSCI 470 - Programming in Java (3)
CSCI 473 - .NET Programming (3)

Electives (3-4)

One additional computer science course numbered above CSCI 300 (3-4).

Restriction: A student may not elect to take both CSCI 350 and CSCI 490Q.

Total hours for Emphasis 1: 49-50

Emphasis 2. Public Safety (27)

Required Courses (12)

POLS 331 - Introduction to Public Administration (3)
ILAS 390 - POLS 490, or SOCI 390 - Internship (3)*
SOCI 288 - Criminology (3)
SOCI 289 - The Criminal Justice System (3)

Public Administration Courses (6)

At least two of the following:

POLS 303 - State and Local Government (3)
PSPA 410 - Supervision in the Public Sector (1)
PSPA 412 - Public Budgeting (3)
PSPA 413 - Community Engagement in Public Safety Agencies (1)
SOCI 375 - Sociology of Organizations (3)

Public Safety (9)

Three of the following:

POLS 386 - Global Terrorism (3)
POLS 415 - Criminal Law (3)
SOCI 380 - Deviance in Society (3)
SOCI 384 - Police in a Democratic Society (3)
SOCI 388 - Punishment and Corrections (3)
UNIV 310 - Foundations in Homeland Security and Disaster Preparedness (3)

Total hours for Emphasis 2: 48 hours

Emphasis 3. Instructional Technology, Training and Evaluation

The emphasis in Instructional Technology, Training and Evaluation is designed to provide students with occupationally-relevant skills and knowledge in the area of instructional design and assessment, training and learning media development, and human performance technology.

Students will acquire the conceptual and technical basis of instructional design, obtain hands-on experience with various interactive and evaluation technologies and programming, and have the opportunity to engage in collaborative works in authentic environments. Moreover, students will be participating in internships or portfolio development to gain valuable hands-on experience in the working world and increase their chances for future employment.

Prerequisites are required in the area of communications, media production, computer applications (including, but not limited to, word processing and slide show software), psychology, and math. All majors must meet NIU's requirements for general education (29-41 hours), complete a minimum of 40 hours of course work at the 300-400 level, and earn a minimum of 30 hours at NIU. It is expected that students needing to complete additional general education course work would be able to do so at their community colleges with course selection assistance from a department adviser. This program is open to students with an A.A.S. degree; who also have technical knowledge and skills in a related area through certification courses/training or other demonstrable evidence accepted by the department faculty. Up to 30 proficiency credits may be awarded for learning experiences and education in an area related to the emphasis. Proficiency credit will be awarded on a per-course basis, and proficiency will be determined using one of three criteria: (1) performance on a department-administered proficiency exam, (2) attainment of one or more technical certificates or licenses earned in the field, or (3) evaluation by a review committee consisting of faculty members and adviser(s) of a submitted portfolio demonstrating professional expertise/competence in the area relevant to the proficiency credit being requested. Attained proficiency credits

* Students with appropriate public safety experience substitute an upper-division elective.

¹ May be counted toward Group One if not used for the core.

² May be counted toward certificate when topic is appropriate.

may be used for this emphasis only, and may not be applied to other emphases in the B.S. in Applied Management degree program.

This is primarily an online program.

Required Courses (25)

ETR 340 - Survey Methods for Training and Evaluation (3)
 ETR 431 - Program/Performance Evaluation (3)
 ETR 450 - Data Analysis for Design and Evaluation (3)
 ETT 310 - Instructional Design Models, Strategies and Tactics (3)
 ETT 311 - Instructional Media Literacy, Prototyping and Publication (3)
 ETT 448 - Instructional Architecture for Learning Applications (3)
 ETT 459 - Learner-Centered Educational Courseware Development (3)
 ETT 464 - Human Performance Technology (3)
 ETT 497 - Independent Study in Instructional Technology (3),
 OR ETR 497 - Independent Research in Research and Assessment (1)

Additional prerequisites are required in the area of communications, media production, computer applications (such as, but not limited to, word processing and slide presentation software), psychology, and math.

Total hours for Emphasis 3: 46 hours

Certificates of Undergraduate Study

Adolescence (12)

Coordinator: Director, Collaborative on Early Adolescence

This interdisciplinary certificate is intended to provide broad background in the area of adolescence and is offered through Northern Illinois University's Collaborative on Early Adolescence (NIU-CEA). The certificate is designed to complement undergraduate course work in a variety of majors. It is open to all NIU undergraduates who maintain a good academic standing in the university. A minimum grade of C in all certificate courses is required. All certificate courses must be completed within six calendar years. Students must complete a minimum of 12 semester hours. Courses must be taken in at least two departments. Some courses may have prerequisites that are not part of the certificate course work. In some cases, these prerequisites can be waived by the department offering the course for students pursuing the certificate. With the approval of the major department, courses used to satisfy requirements of the certificate may also be applied toward an undergraduate major. Students are encouraged to meet with the Director of the Collaborative on Early Adolescence early in planning their coursework for the certificate.

One of the following core courses (3)

EPS 307 - Development of the Adolescent (3),
 OR EPS 406 - Issues in Human Development and Learning in the Middle School and High School Years (3),
 OR PSYC 424 - Adolescent Development (3)

Additional Courses (9)

At least one course selected from each of the following groups:

Group One

EPS 307¹ - Development of the Adolescent (3)
 EPS 406¹ - Issues in Human Development and Learning in the Middle School and High School Years (3)
 EPS 419 - The Middle School Child (3)
 LTLA 363 - Young Adult Literature in a Multicultural Society (3)
 PHHE 404 - Drug Education (3)
 PHHE 406 - Sexuality Education (3)

PHHE 408 - Mental and Emotional Health (3)
 PSYC 424¹ - Adolescent Development (3)
 TLCI 422 - Middle School Organization and Instruction (3)
 SOCI 488 - Juvenile Delinquency (3)
 WOMS 332 - Growing Up Female (3)

Group Two

EPS 492² - Special Topics in Educational Psychology (3)
 FCNS 489² - Topical Issues in Family and Child Studies (3)
 PHHE 472² - Current Issues: Health Education (3)
 PSYC 495² - Seminar in Special Topics (3)
 HIST 473² - Topics in Women's History (3)
 WOMS 430² - Special Topics in Women's Studies (3)

Applied Ethics (12)

**Coordinators: Jason Hanna, 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)

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)
 PHHE 435 - Ethical Decision Making for Health Professionals (3)
 PHIL 335 - Environmental Ethics (3)
 PHIL 336 - Biomedical Ethics (3)
 PHIL 337 - Business Ethics (3)
 PHIL 353 - Philosophy of Law (3)
 PHIL 390³ - Contemporary Topics in Philosophy (3)
 PHIL 430³ - Topics in Ethics (3)
 POLS 322 - Politics and the Life Sciences (3)
 POLS 323 - Biomedicine and the Law (3)
 POLS 359 - War, Empire, and Ethics (3)
 TECH 401 - Ethics in Technology (3)

Homeland Security (18-21)

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. The certificate prepares students 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-

* Students with appropriate public safety experience substitute an upper-division elective.

¹ May be counted toward Group One if not used for the core.

² May be counted toward certificate when topic is appropriate.

³ Subject to approval of certificate coordinators, provided that the topic primarily covers applied ethics..

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 (7)

- POLS 386 - Global Terrorism (3),
OR GEOG 451 - Political Geography (3)
- UNIV 310 - Foundations in Homeland Security and Disaster Preparedness (3),
OR TECH 432 - Disaster Preparedness (3)
- One of the following (1)
 - IEET 490 - Topics in Engineering and Engineering Technology (1)
 - ILAS 440 - Independent Study (1)
 - TECH 398 - Individual Problems in Technology (1)
 - UHHS 301 - Independent Study in Health and Human Sciences (1)

Biochemical Sciences Track (11-14)

**Coordinators: Josef Bujarski, Department of Biology;
Victor Ryzhov, Department of Chemistry and Biochemistry**

- Three of the following (9-11)
 - BIOS 313 - Microbiology (4)
 - BIOS 423 - Principles of Virology (3)
 - BIOS 479 - Biotechnology Applications and Techniques (3)
 - CHEM 425 - Analytical Chemistry II (4)
 - CHEM 472 - Biological Chemistry I (3)
 - CHEM 473 - Biological Chemistry II (3)
- Elective course chosen with approval of certificate coordinator (3)
- One of the following (2-3)
 - AHLS 336 - Clinical Diagnostic Microbiology (2-3)
 - POLS 320 - Biopolitics and Human Nature (3)
 - POLS 322 - Politics and the Life Sciences (3)
 - UHHS 450 - Administration for Professional in Health and Human Sciences (3)

Emergency Management and Response Track (12)

Coordinator: Department of Technology

- Four of the following (12)
 - CSCI 350 - Computer Security Basics (3)
 - ISYE 475 - Decision Analysis for Engineering (3)
 - TECH 231 - Safety Programs (3)
 - TECH 433 - Toxicology for Industry (3)
 - TECH 436 - Design and Administration of Industrial Safety Programs (3)
 - TECH 437 - Fundamentals of Industrial Hygiene (3)
 - TECH 440 - Monitoring and Evaluating Exposures to Hazardous Materials (3)
 - TECH 441 - Hazard Control in Industrial Operations (3)
 - TECH 482 - Industrial Safety Engineering Analysis (3)
 - TECH 485 - Risk Management (3)
- Elective course chosen with approval of certificate coordinator (3-6)

Environmental and Hazards Risk Assessment Track (12)

**Coordinators: Andrew Kremenec, Department of Geography;
Rama Lingham, Department of Mathematical Sciences**

- STAT 350 - Introduction to Probability and Statistics (3)
- Three of the following (9)
 - CSCI 350 - Computer Security Basics (3)
 - GEOG 359 - Introduction to Geographic Information Systems (3)
 - GEOG 406 - Natural Hazards and Environmental Risk (3)
 - GEOG 408 - Tropical Environmental Hazards (3)
 - GEOG 459 - Geographic Information Systems (3)
 - STAT 470 - Introduction to Probability Theory (3)
 - STAT 481 - Probabilistic Foundations in Actuarial Science (3)
- Elective course chosen with approval of certificate coordinator (3-6)

Health Sciences Track (11)

Coordinator: College of Health and Human Sciences

- Four of the following (11)
 - AHLS 336 - Clinical Diagnostic Microbiology (2-3)
 - CAHC 493 - Crisis Intervention in the Helping Professions (3)
 - GEOG 306 - Severe and Hazardous Weather (3)
 - GEOG 406 - Natural Hazards and Environmental Risk (3)
 - PHHE 315 - Introduction to Health Promotion (3)
 - PHHE 325 - Biostatistical Applications in Public Health (3)
 - PHHE 351 - Elements of Environmental Health (3)
 - PHHE 455 - Public Health Epidemiology (3)
 - PHHE 467 - Public Health Research and Evaluation (3),
OR UHHS 460 - Introduction to Research in Health and Human Sciences (3),
 - PHHE 469 - Principles of Health Planning (3)
 - TECH 231 - Safety Programs (3)
 - UHHS 430 - Working with Diverse Populations in Health and Human Sciences (3)
 - UHHS 450 - Administration for Professionals in Health and Human Sciences (2-3)
 - OR AHLS 446 - Principles of Laboratory Management and Practice (1)
- Elective course chosen with approval of certificate coordinator (3-6)

Inter-College and University-Wide Interdisciplinary Courses

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 105. INTRODUCTION TO LIBRARY AND INFORMATION RESEARCH (1). A broad overview of information-literacy concepts as related to the library. Introduction of skills for locating, evaluating, and using all types of resources with special emphasis on the social value and role of quality information. Includes a section on the legal and ethical uses of information. This is a hybrid course; each section has a 25-minute online component. S/U grading may be used.

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.

UNIV 310. FOUNDATIONS IN HOMELAND SECURITY AND DISASTER PREPAREDNESS (3). Introduction to the field of homeland security and disaster preparedness. Discussion of the risks and hazards associated with planned events, emergencies, natural, human-made, and technological disasters. Emphasis on hazard recognition, planning, mitigation, response, and recovery from these types of events. Enrollment not open to students with credit in TECH 432. PRQ: At least sophomore standing.

Black Studies (BKST)

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.

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.

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.

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.

300. FOUNDATIONS OF BLACK STUDIES (3). Introduction to the development, philosophy, and history of black studies.

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.

312. SOCIAL PHILOSOPHY OF HIP HOP CULTURE (3). Focus on the comparative historical-cultural analysis of hip hop from its various cultural forms music, dance, poetry, relationships, fashion. Analyze how hip hop has impacted the current political scene and its contributions to the history and experience of people of African descent.

316. AFRICAN-AMERICAN CRITICAL THOUGHT (3). Surveys and analysis of the sociohistorical thought of the African-American community of the 19th and 20th centuries. PRQ: BKST 200 or BKST 219.

350. BLACK ECONOMICS (3). Focus on the development of historical-cultural analysis of the economic condition of African Americans including the exploration of the development of appropriate interventions for pressing socioeconomic concerns.

402. THE AFRICANA WOMAN (3). Examination of and practical look at the history, contributions, and role of the African American woman.

405. CONTEMPORARY ISSUES OF BLACK MEN (3). Survey and analysis of the sociohistorical condition of Black men, on the continent of Africa and in the Diaspora, the challenges they face, and the potential solutions to the challenges of their particular and global conditions. PRQ: BKST 200, BKST 202, BKST 300, or consent of the instructor.

410. PSYCHOLOGY OF AFRICAN AMERICAN EXPERIENCE (3). Focus on the development of historical-cultural analysis of the condition of African Americans, and the sociobehavioral responses to those conditions. PRQ: By permit only.

420. BLACK RELIGION IN AMERICA (3). Focus on the development and impact of religious structures and organizations on the historical-cultural and economic condition of African Americans.

440. BLACK LIBERATION MOVEMENTS (3). Focus on the comparative historical-cultural analysis of the liberation movements of African Americans and Black South Africans. PRQ: By permit only.

445. INDEPENDENT STUDY IN BLACK STUDIES (1-3). 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.

493. AFROCENTRICITY (3). Capstone course for the minor in black studies. Focus on developing tools for research on Africana populations. PRQ: BKST 219, BKST 300, and consent of director.

Environmental Management 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.

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 (1-9). 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 (1-9). 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

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)

Core Courses (12)

- BKST 200 - Racism in American Culture and Society (3)
- BKST 219 - Introduction to African Studies (3)
- BKST 300 - Foundations of Black Studies (3)
- BKST 493 - Afrocentricity (3)

African Option (6)

- Two of the following (6)
 - 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)

- Two of the following (6)
 - BKST 202 - Issues Facing African-American Students (3)
 - BKST 211 - Educating for Cultural Sensitivity (3)
 - BKST 302 - Topics in Black Studies (3)
 - BKST 312 - Social Philosophy of Hip Hop Culture (3)
 - BKST 350 - Black Economics (3)
 - BKST 402 - The Africana Woman (3)
 - BKST 405 - Contemporary Issues of Black Men (3)
 - BKST 420 - Black Religion in America (3)
 - BKST 440 - Black Liberation Movements (3)
 - BKST 445 - Independent Study in Black Studies (1-3)
 - HIST 271 - The African-American Since 1865 (3)
 - HIST 472 - Topics in African-American History (3)
 - JOUR 490 - Ethnic Minorities and the News Media (3)

- POLS 326 - Government and Welfare (3),
- OR PSPA 326X - Nonprofit-Management (3)
- SOCI 358 - Racial and Ethnic Minority Families (3)
- SOCI 361 - Race and Ethnicity (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 various bequests including large and selective private collections 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 30 courses taught at NIU with significant content on Burma.

For more information visit the website at www.niu.edu/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, administers a minor in Latino and Latin American Studies and a graduate concentration in Latin American Studies, and provides academic advisement for students enrolled in these programs. 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: James T. Collins, Ph.D.

The Center for Southeast Asian Studies, established in 1963, and recognized by the U.S. Department of Education as an Undergraduate National Resource Center for Southeast Asian Studies since 1987, provides leadership, focus, and coordination for Southeast Asian Studies at NIU. It is responsible for addressing student needs, 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 Brunei, Burma, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and

Vietnam which offer qualified students opportunities and facilities for graduate research and undergraduate training in these countries. The center is an active member of SEASSI (Southeast Asian Studies Summer Institute), a national consortium of Southeast Asian studies centers. Since 2011, the center has been funded to offer undergraduate Southeast Asian language fellowships which pay full tuition and a modest living allowance in both the academic year and the summer. See also "Minor in Southeast Asian Studies."

Regional History Center

Director: Cindy S. Ditzler, M.A.

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 Regional 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

Associate Provost: 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.

For students participating in an approved transfer agreement leading to a joint degree between Northern Illinois University and a partner international university, Northern Illinois agrees to accept the completed international transfer curriculum as the equivalent of the lower division general education requirements for a baccalaureate degree. In making such collaborative arrangements with sister institutions around the world, NIU will allow students to transfer this portion of their baccalaureate degree from the international university to NIU without incurring a loss of credit. Successful completion of this package of courses assures students that all lower division general education requirements are fulfilled.

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, Chile, China, Costa Rica, Czech Republic, Denmark, Dominican Republic, Estonia, Fiji, Finland, Germany, Ghana, Hungary, Iceland, Ireland, Italy, Japan, Republic of Korea, Malta, The Netherlands, New Zealand, Nicaragua, Norway, Poland, Russia, Scotland, Senegal, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, and Uruguay.

NIU currently offers faculty-directed programs in 23 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.

Belgium: Printmaking. Early to late February. In cooperation with the Frans Masereel Centrum. Students will produce prints utilizing the European methods and equipment, which are in many ways varied from how they conduct processes in the United States. Students will be working on a large German Mailander offset press to produce lithographs and monotypes. This is a unique piece of equipment to European studios and is rare to shops in the United States. (UG or GR)

Belize: Health studies. Early to mid June. In cooperation with the University of Belize. Examination of the health care system in Belize and the impact of the World Health Organization; insight to the indigenous languages and culture of bush healing; interaction with students from the University of Belize; interdisciplinary networking of students from various health science programs. (UG or GR)

Cambodia: Cultural Anthropology Field School. Mid June to mid July. In cooperation with the Royal University of Fine Arts in Phnom Penh. Students will participate in classroom lectures and fieldwork focusing on Cambodian culture, cultural reconstruction in the post-Khmer Rouge era, Cambodian Buddhism, as well as practical application of ethnographic field methods and interviewing techniques in rural villages. (UG or GR)

Canada: Discovering Montreal. Late May to early June. In cooperation with Université de Montreal. Examines the richness of Canadian culture as it is manifested in the beautiful, international city of Montreal. This city enjoys a distinctly French Canadian identity, strong Canadian English influences, and a truly global character as represented by its considerable ethnic, linguistic, and religious diversity. Knowledge of French is not necessary to participate in this program. (UG)

England: NIU at Oxford: Biological sciences, English, and political science. Late June to late July. In cooperation with Oriel College, one of the 34 colleges that make up Oxford University. Courses offered at the undergraduate and graduate levels are designed to take advantage of the unique resources of the British setting. Formal class meetings supplemented by individual tutorials. (UG or GR)

France: NIU College of Law in Agen: Late May to mid July. In cooperation with the University of Bordeaux-Montesquieu IV. Designed to give non-French speaking students an understanding of the French civil law system and the legal system of the European Union. Language of instruction is English. (LAW)

France: History and Literature in Bordeaux, French and history. Early to late June. In cooperation with Université Montesquieu-Bordeaux IV. Students will have the opportunity to learn about French history, language, literature, and culture through an immersion in southern French society. (UG or GR)

Ghana: NIU in Ghana, West Africa. Mid-May to early June. In cooperation with the University of Development Studies, Tamale. Explores the riches of Ghanaian life and culture, while also engaging in a cross-cultural educational experience at the University of Development Studies, Tamale, Ghana. The program will provide an effective mix of classroom lecture and outside experiential engagement as the core of the study abroad experience. (UG or GR)

Indonesia: Public Health and Health Education. Early to late June. In cooperation with Hasanuddin University in Makassar. Explores public health issues, hospital and health care settings, environmental health and safety issues, and Indonesian culture and practice. Students will have the opportunity to intern with professionals depending on their academic backgrounds. (UG or GR)

Ireland: Exploring Ireland's Community and Mental Health Services. Late June to mid July. Provides opportunities to explore a variety of mental health and community psychiatric health care services in Ireland. Learn about the history of Ireland's mental health care system, mental health services, community /public health system, Mental Health Commission, mental health law, patient rights of Ireland's mentally ill, and the preparation and education of Ireland's psychiatric nurses and mental health care workers. (UG or GR)

Ireland: Global Selling Perspectives. Early to mid January. Assist sales students in understanding the complexity and difficulty involved with selling in different countries (cultures). The program is also designed to help students learn and develop specific selling skills that are not typically taught at NIU. (UG or GR)

Ireland: Media and culture, and communication, and history. Mid June to mid July. In cooperation with Trinity College. Examines Ireland's struggle to define its own cultural identity in a world of American and British media domination. The program will examine issues of international culture via an immersion in Irish politics, history, literature, and media. (UG or GR)

Italy and Spain: Design and Architecture. Late May to early June. An overview and blend of both historical and contemporary design and architecture will be introduced by means of on-site study in Italy and Spain. The program will integrate historical information and contemporary trends in architecture and design as it relates to the unique cultural fabric of Italy and Spain. (UG or GR)

Madagascar: Past and Present: Biodiversity, Extinction and Conservation. Early to late June. Provides students with the opportunity to learn first-hand about primate biodiversity, extinction, forest fragmentation and conservation in Madagascar, one of the world's foremost biodiversity hotspots. (UG or GR)

Malaysia: History and Culture. Late June to early August. 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)

Multicountry: Art, Appropriation and Display: The Museums of Paris, Cologne and Amsterdam. Mid May to early June. Provides a broad base of historical and museological knowledge, and the experience of centuries of the visual culture of these three cities through site visits and lectures. Students will develop a personal research project on an aspect of art/visual culture that intrigues them. (UG or GR)

The Netherlands: Peace, Justice, and the International Courts. Early to mid June. Examines the intertwined issues of genocide and international justice. The program will focus on the meaning of justice and its various dimensions, and how the historical pursuit of justice has been complicated by issues such as sovereignty, denial of genocide, prolonged periods of conflict and violence, and an outright rejection of international jurisdiction. (UG or GR)

Poland: Exploring Contemporary Graphic Design. Mid March. In cooperation with the Academy of Fine Arts in Katowice. Provides the opportunity to meet and work with students at the Academy of Fine Arts in Katowice. Students will focus on graphic design and studio art practice. The program will integrate historical information and contemporary trends in European graphic design and art. (UG or GR)

Russia: Moscow: Theater and performance studies at the Moscow Art Theatre (MXAT). Fall. 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)

Sicily: Archaeological field school. Mid June to early July. In conjunction with the Universities of Gothenburg, Oslo, Palermo, and Stanford and part of the Monte Polizzo Archaeological Project. Provides an introduction and practical application of archaeological sampling and field methodology; field experience in archaeological survey techniques and archaeological excavation techniques; laboratory experience in pottery analysis; exposure to a broad range of artifacts (Neolithic through Medieval); and a multi-cultural experience with other international students and exposure to a new culture. (UG or GR)

Sierra Leone: African Democracy and Socioeconomic Development through Sustainable Engineering. Mid June to early July. Provides students with the opportunity to complement their education from NIU with knowledge about political, economic, social, and technological issues in Africa. Students will also engage in a project to develop renewable energy technologies that are appropriate for developing countries, with Sierra Leone as a case study framework. (UG or GR)

Spain: Spanish Language and Culture in Toledo. Mid June to mid July. 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)

Tanzania: Experiential Learning with NGOs. Late June to late July. Learn about Nongovernmental Organizations (NGOs) in developing countries, the relationship between governments and NGOs in Tanzania, and the challenges and rewards of engaging with grass-roots NGOs in a project for building improvements in a school. (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. 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

Director: Heesun Majcher

The International Student and Faculty Office (ISFO) assists all nonimmigrant students, scholars, faculty, and staff at Northern Illinois University. The office follows up with all immigration regulation-related matters of the university as required and necessary; processes immigration documents for all nonimmigrant students, scholars, faculty, and staff; coordinates all admission efforts for incoming international undergraduate students; and advises all international students, scholars, faculty, and staff in immigration-related issues.

The office provides ongoing support for all nonimmigrant population on campus in their academic, cultural, and social adjustments with such programs as comprehensive orientation programs, workshops in various topics, and other activities as necessary. Through these efforts, the office makes continuing efforts to help international students, scholars, faculty, and staff to gain the maximum benefits from the many opportunities that the university offers, and also to increase international understanding and appreciation for diversity on campus.

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

Jennifer Rosato, J.D., dean

David Gaebler, 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. The College of Law is fully accredited by the American Bar Association and is a member of the Association of American Law Schools. Student enrollment is approximately 300.

The College of Law is housed in Swen Parson Hall. The facilities as well as the student/faculty ratio promote a community atmosphere and maximize interaction between students and their law professors. The law library provides ample space for intensive study and reflection in quiet privacy and the latest in electronic legal research tools. A multipurpose moot courtroom, equipped with up-to-date technology, serves as a realistic setting for practical exercises in courtroom proceedings. In addition to academics, law students are involved in a wide variety of scholarly and cocurricular activities such as Law Review, several moot court and trial advocacy teams, and a foreign study program in France.

Application for admission is made through the College of Law, not through the Graduate School. Information regarding degree programs, academic requirements, application procedures, and tuition and fees is available from the College of Law Office of Admission and Financial Aid, Room 151, Swen Parson Hall (815-753-8595) or at <http://law.niu.edu/law/>.

Graduate School

Lisa Freeman, D.V.M., Ph.D., vice president for research and graduate studies
Bradley Bond, Ph.D., dean of the Graduate School

A student who wishes to obtain a graduate degree must apply for and be granted admission to the Graduate School. Courses numbered 500-799 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 which that degree program is housed.

Master of Arts in Teaching (M.A.T.)
 (see also individual departments for specializations)

Master of Science in Teaching (M.S.T.)
 (see also individual departments for specializations))

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
 Counselor Education and Supervision

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.)
 Curriculum and Instruction
 Educational Administration
 Educational Psychology
 Foundations of Education
 School Business Management
 Educational Specialist (Ed.S.)
 Educational Administration
 Doctor of Education (Ed.D.)
 Curriculum and Instruction
 Educational Administration
 Educational Psychology

Department of Literacy and Elementary Education

Master of Arts in Teaching (M.A.T.)
with specialization in
 Elementary Education with Initial Licensure
 Master of Science in Education (M.S.Ed.)
 Elementary Education
 Literacy Education
 Doctor of Education (Ed.D.)
 Curriculum and Instruction
with specialization in
 Reading

Department of Special and Early Education

Master of Science in Education (M.S.Ed.)
 Early Childhood 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

College of Engineering and Engineering Technology

Master of Science in Teaching (M.S.T.)
with specialization in
 Engineering Education

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 and Communicative Disorders

Master of Arts

Communicative Disorders

with specialization in

Audiology

Rehabilitation Counseling

Speech-Language Pathology

Master of Physical Therapy (M.P.T.)

Doctor of Audiology (Aud.)

Doctor of Physical Therapy (D.P.T.)

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

Family and Consumer Sciences

with specialization in

Apparel Studies

Family and Consumer Sciences Education

Nutrition and Dietetics

Department of Military Science

School of Nursing and Health Studies

Master of Arts in Teaching (M.A.T.)

with specialization in

Health Education, 6-12

and Middle School

Master of Public Health (M.P.H.)

with or without specialization in

Health Promotion

Health Services Management

Master of Science (M.S.)

Nursing

Master of Science in Teaching (M.S.T.)

with specialization in

Health Education, 6-12

and Middle School

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

Biology Teaching

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

with or without specialization in

nanoscience

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.)

Doctor of Philosophy (Ph.D.)

Department of Geology and Environmental Geosciences

Master of Science (M.S.)

Geology

Master of Science in Teaching (M.S.T.)

with specialization in Geoscience Education

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

Master of Science in Teaching (M.S.T.)

with specialization in

Middle School Mathematics Education

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.)

with or without specialization in

nanoscience

Department of Political Science

Master of Arts (M.A.)

Master of Public Administration (M.P.A.)

with specialization in

Fiscal Administration

Local Government Management

Nonprofit Management

Public Management and Leadership

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 and Design**

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.)
 Doctor of Philosophy (Ph.D.)
 Art Education

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

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
 Adult Continuing Education
 Advanced Qualitative Methodology in Education
 Advanced Quantitative Methodology in Education
 Advanced Teaching Practices
 Applied Mechanics
 Applied Statistics
 Assistive Technology Specialist
 Behavior Specialist
 Bioinformatics
 Business Analytics Using SAP Software

Career Development
 Children's and Young Adult Literature/Media
 College Teaching
 Computer-Aided Design and Computer-Aided Manufacturing
 Curricular and Pedagogical Practices in Social Justice Education
 Curriculum Adaptations Specialist
 Deaf-Blind Rehabilitation Services
 Design of Thermal Systems
 Digital Image Processing
 Digital Signal Processing
 Digital Systems
 Director of Special Education
 Eating Disorders and Obesity
 Elementary Mathematics Teaching
 English Education
 Entrepreneurship
 Environmental Education
 Environmental Health and Safety
 Family Nurse Practitioner
 Foreign Language Instructional Technology
 Foundation of Accountancy
 Foundation of Education
 Geographic Information Analysis
 German Language, Literature, and Culture
 Gerontology
 Health Education
 Healthcare Policy Management
 Higher Education
 Homeland Security
 Industrial Control
 Industrial Project Management
 Industrial Workplace Design Systems
 Innovative Teaching with Common Core Standards in Elementary Education
 Integrated Manufacturing Systems
 Integrated Systems Engineering
 Law and Women's Studies
 Lean Six Sigma
 Lesbian, Gay, Bisexual, and Transgender Studies
 Logistics
 Management Information Systems
 Managerial Leadership
 Medical Family Therapy and Counseling
 Middle School Literacy
 Mobile Programming
 Multiple Disabilities Specialist
 Museum Studies
 Nursing Education
 Outdoor Education
 Postsecondary Developmental Literacy and Language Instruction
 Problem-Based Learning in Educational Psychology
 Public Health
 Public Management
 Quality Control of Manufacturing Processes
 Response to Intervention
 Semiconductor Devices
 Semiconductor Fabrication
 Southeast Asian Studies
 Spanish Language, Literature, and Culture
 Strategic Marketing
 Systems Management
 Teaching English as a Second Language and Bilingual Education
 Technical Logistics
 Technical Writing
 Traffic Safety Education
 Vibration and Control System Design
 VLSI Design
 Women's Studies
 Workplace Learning and Performance

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-, 600-, or 700-level graduate courses 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 graduate-level courses.

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.

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Patrick José Dawson, M.A., M.L.S., dean
Chalermsee Olson, M.A., M.L.S., acting associate dean
T. J. Lusher, M.A., M.L.I.S., assistant dean

The Northern Illinois University Libraries system consists of Founders Memorial Library, Faraday Library, and the Music Library. 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 I-Share System, a network involving 80 academic institutions throughout Illinois. Access is via the World Wide Web and allows users to immediately determine which of the 80 libraries own desired research materials. Materials not owned by NIU can be obtained quickly from other I-Share member libraries.

Founders Memorial Library, the main library, has six levels with 327,000 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, document delivery services, the reserves collection, periodicals collection, media collection, and the Scholars' Den. Microforms, the map collection, and

government publications are located on the second floor; the Digital Convergence Lab and the Reading Assistance Center are housed on the third floor; and the Regional History Center and Archives, Rare Books and Special Collections, and the Southeast Asia collection are on the fourth floor. The upper three floors house circulating books.

Faraday Library serves faculty and students in the disciplines of chemistry and physics. Similarly, the Music Library serves the music curriculum Regular, interim, and holiday hours are posted near the entrance to each library and on the library website. Call ahead to be sure of the status, or check online at www.ulib.niu.edu/aboutus/hours.cfm.

NIU libraries provide a variety of guides to collections and services. These materials are available online at www.ulib.niu.edu. 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 upper-level classes, in-depth instruction related to materials in particular subject areas. Online help is available from the home page's "help" link. The course UNIV 105, Introduction to Library and Information Research, provides a broad overview of information-literacy concepts as related to the library, including locating, evaluating, and using all types of resources.

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University Press

Founded in 1965, the Northern Illinois University Press publishes scholarly monographs and books of general interest, as well as a limited selection of fiction under its Switchgrass Books imprint. With a focus on the humanities and social sciences, NIU Press has particular strength in Russian and Slavic Studies; European, Southeast Asian, and American history; religion; and philosophy. Seeking to advance knowledge about the Midwest, the press has published a wide range of books on the archaeology, history, literature, and culture of Chicago, Illinois, and surrounding states in the region. At present, NIU Press has over 600 titles in print.

The publication of any book through the 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 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

For students earning an A.A., A.S., or approved A.A.T. degree in early childhood, secondary math, or special education 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 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 Numbers
<i>Communication</i>	
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 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
CHEM 210 - General Chemistry I	P1 902
CHEM 210 - General Chemistry I, and	
CHEM 212 - General Chemistry Laboratory I	P1 902L
GEOG 101 - Survey of Physical Geography	P1 909
GEOG 101 - Survey of Physical Geography, and	
GEOG 102 - Survey of Physical Geography Laboratory	P1 909L
GEOG 105 - Introduction to the Atmosphere	P1 905
GEOG 105 - Introduction to the Atmosphere, and	
GEOG 106 - Introduction to the Atmosphere Laboratory	P1 905L
GEOL 103 - Planetary and Space Science	P1 905
GEOL 104 - Introduction to Ocean Science	P1 905
GEOL 105 - Environmental Geology	P1 908
GEOL 120 - Introductory Geology	P1 907
GEOL 203 - Global Change	P1 906
GEOL 320 - Environments and Life Through Time	P1 907L
PHYS 140 - Physics and Society	P1 901L
PHYS 150 - Physics	P1 900
PHYS 150A - Physics	P1 900L
PHYS 162 - Elementary Astronomy	P1 906
PHYS 180 - Acoustics, Music, and Hearing	LP 900
PHYS 253 - Fundamentals of Physics I: Mechanics	P2 900L

Humanities and Fine Arts

ARTH 282 - Introduction to World Art	F2 900
ARTH 292 - Art and Design Since 1900	F2 902
ARTH 294 - Art History Survey IV: Arts of the East	F2 903N
ENGL 110 - Experience of Fiction	H3 901
ENGL 115 - Masterpieces of British Literature	H3 912
ENGL 116 - Masterpieces of American Literature	H3 914
ENGL 201 - Introduction to Poetry	H3 903
ENGL 310 - Literary Classics	H3 906
ENGL 315 - Shakespeare	H3 905
FLCL 271 - Classical Mythology	H9 901
FLFR 371 - Masterpieces of French Literature in Translation	H3 909
FLRU 261 - Russian Culture and Literature	H3 909
HIST 110 - Western Civilization to 1500	H2 901
HIST 111 - Western Civilization: 1500-1815	H2 902

HIST 112 - Western Civilization Since 1815	H2 902
IDSP 225 - Introduction to Medieval Society and Culture	HF 902
IDSP 290 - Drama Into Film	F2 908
MUHL 220 - Introduction to Music	F1 900
PHIL 101 - Introduction to Philosophy	H4 900
PHIL 231 - Contemporary Moral Issues	H4 904
SEAS 225 - Southeast Asia: Crossroads of the World	HF 904N
TH-D 222 - Dance and the Fine Arts	F1 906
THEA 203 - Introduction to Theatre	F1 907

Social and Behavioral Sciences

ANTH 101 - Human Origins	S1 902
ANTH 120 - Anthropology and Human Diversity	S1 900N
ANTH 210 - Exploring Archaeology	S1 903
ANTH 220 - Introduction to Cultural Anthropology	S1 901N
ANTH 240 - General Physical Anthropology	S1 902
ECON 260 - Principles of Microeconomics	S3 902
ECON 261 - Principles of Macroeconomics	S3 901
FCNS 230 - Child Development	S6 903
FCNS 280 - Human Development, the Family, and Society	S6 902
FCNS 284 - Introduction to Family Relationships	S7 902
GEOG 202 - World Regional Geography	S4 900N
GEOG 204 - Geography of Economic Activities	S4 903N
HIST 140 - Asia to 1500	S2 908N
HIST 141 - Asia Since 1500	S2 909N
HIST 171 - The World Since 1500	S2 913N
HIST 260 - American History to 1865	S2 900
HIST 261 - American History Since 1865	S2 901
HIST 340 - Ancient India	S2 916N
HIST 341 - History of India: 1740-1947	S2 917N
HIST 344 - History of Ancient China	S2 914N
HIST 345 - History of China Since the T'ang Dynasty	S2 915N
HIST 348 - African History to 1600	S2 906N
HIST 349 - African History Since 1600	S2 907N
HIST 381 - Colonial Latin America	S2 910N
HIST 382 - Modern Latin America	S2 911N
POLS 100 - American Government and Politics	S5 900
POLS 260 - Introduction to Comparative Politics	S5 905
PSYC 102 - Introduction to Psychology	S6 900
PSYC 225 - Lifespan Development: Childhood Through Adulthood	S6 902
SOCI 170 - Introduction to Sociology	S7 900
SOCI 260 - Introduction to Social Psychology	S8 900
SOCI 361 - Race and Ethnicity	S7 903D

University Administration

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Division of Student Affairs and Enrollment Management

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 Katrina Caldwell, Ph.D., assistant vice president for student affairs
 Melanie Tucker, Ed.S., assistant vice president for student affairs

Division of University Advancement

Michael P. Malone, M.F.A., vice president for university advancement
 Joseph P. Matty, M.S.Ed., associate vice president for alumni relations

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).

Annual Security Report

The Northern Illinois University annual security report is available on-line for review at <http://www.niu.edu/about/safety/index.shtml>. Printed copies are available through the NIU Department of Public Safety, 375 Wirtz Drive, DeKalb, IL 60115.

Leaves of Absence for Employees

Military leaves of absence will be granted in accordance with applicable Illinois statutes and executive orders issued by the State of Illinois in response to emergency situations and military operations.

Leaves of absence will be granted for volunteer services related to disaster relief in accordance with applicable Illinois statutes or executive orders issued by the State of Illinois in response to emergency situations.

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.

As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records – including your Social Security Number, grades, or other private information – may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when the University objects to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

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.

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.

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 therefrom 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.

Index

- 04 licensure, emphasis, 122
- 04 licensure with preschool special education approval, emphasis, 122
- 2-D studio (art),
 - courses, 338-340
 - emphasis, 333
- 3-D studio (art),
 - courses, 338-340
 - emphasis, 334
- 3+3 Integrated B.S. or B.A./J.D. Program in Political Science and the College of Law, 314
- 6-12 educator licensure, general physical education, emphasis, 104
- 60-80 rule. *See* Reentrance of Illinois public community college graduates
- Abbreviations used in this catalog, 8
- Absence from classes, 53-54
- Academic Advising Center, 45
- Academic awards and scholarships, 60-65
- Academic calendar, 4-6
- Academic dismissal, 8
 - See also* Academic probation and dismissal, 49-50
- Academic honors. *See* Degrees with Distinction, 41
 - See also* Honors Program and individual departments
- Academic integrity, 54
- Academic load, 52
- Academic policies, 45-55
- Academic probation and dismissal, 49
 - and reinstatement, 23
- Academic programs
 - graduate, 367-369
 - undergraduate, 13-16
 - See also* Major, Minor, and individual colleges and departments
- Academic progress for financial aid, 58-59
- Academic records, 54
- Academic regulations, 45-55
- Academic schedule and religious observances, 54
- Academic Success. *See* Student Academic Success, Office of
- Academic year, 12
 - calendar, 4-6
- ACCESS tutoring programs, 67
- Accommodations for students with disabilities, 54
- Accreditation, 11
- Accredited institution, definition of, 8, 11
- Accountancy, Department of, 76-79
 - courses, 77-79
 - internship, 77
 - major, 76
 - professional examination preparation, 77
- ACT scores, 18
 - See also* Admission criteria
- Acting,
 - admission to emphasis, 24
 - emphasis, 352
- Activity fee, 56
- Actuarial science,
 - certificate, 294-295
 - emphasis, 294
 - minor, 294
- Add/drop, 8, 47
- Administration
 - business
 - courses, 86
 - major, 85
 - minor, 74
 - hospitality. *See* Nutrition, dietetics, and hospitality
 - administration
 - public, minor, 207
 - public, and service emphasis (political science), 312
 - courses, 316
 - university, 374-375
- Admission, 17-23
 - alternate admission, 21
 - application procedure, 17-18
 - criteria, 18-21
 - early admission to the Graduate School, 370
 - readmission 22-23
 - special, 21-22
 - sponsored, 22
 - to educator licensure, 42
 - See also* individual programs
 - to limited admissions majors, emphases, and areas of study, 24-49
 - to major programs, 17, 45
 - transfer students, 19-21
 - visiting students, 22
- Adolescence, certificate, 359
- Adult and higher education courses, 101
- Advanced computing and simulation, emphasis, 142
- Advanced placement, 50
- Advisement, 45
 - College offices, 45
 - in College of Engineering and Engineering Technology, 127
 - in College of Health and Human Sciences, 155
 - in College of Liberal Arts and Sciences, 191
 - for pre-professional students, 203
- Advocacy, emphasis, 300
- Affirmative action (Human Rights Statement), 376
- Aging (gerontology), 157
- Aid, financial, 58-65
 - and withdrawal from university, 47-48
- Air force ROTC, 180
- Allied Health and Communicative Disorders, School of, 159-164
 - courses, 161-164
- Alternate admission to the university, 21
- American College Test. *See* ACT test scores
- American government and politics courses (Political Science), 315
- Annual Security Report, 376
- Anthropology, Department of, 208-213
 - courses, 209-213
 - major, 208
 - minor, 209
 - educator licensure, 208-209
- Apparel, textiles and merchandising
 - See* textiles, apparel, and merchandising
- Appeal,
 - of grade, 49
 - procedure regarding financial aid, 59

- Application
 - for admission, 17-18
 - for financial aid, 58
 - for graduation, 41
 - schedule for application review, 19
- Applied ethics, certificate, 359
- Applied management, major, 358
- Applied manufacturing technology, emphasis, 148
 - admission to emphasis, 24
- Applied mathematics,
 - emphasis, 290-291
 - minor option, 294
- Applied physics, 306-307
- Applied probability and statistics minor, 294
- Arabic language courses, 265
- Archives, university (Regional History Center), 364
- Army ROTC, 178
- Art,
 - B.A., 332
 - foundations and general courses, 334-335
 - minor, 334
 - studio, major, 332-334
- Art design, and media arts
 - courses, 335-336
 - emphasis, 332-333
- Art and design education,
 - admission, 24
 - courses, 336-338
 - major, 331-332
- Art history
 - courses, 337-338
 - major, 332
 - minor, 334
- Art and Design, School of, 331-340
 - courses, 334-340
- Arts and humanities, emphasis, 300
- Arts, humanities and the, area requirements and course
 - descriptions (in general education), 32-34
- Asian American Center, 67
- Asian American Studies, certificate, 200
- Asian language courses, 265-366
- Asian, Southeast, studies
 - Center for, 363-364
 - minor, 198-199
- Assessment, 15-16
- Athletic training, 105-106
 - admission to emphasis, 24-25
- Athletics, recreational, 68
- Attendance, 53
- Attorneys (Students' Legal Assistance Office), 70-71
- Audiology (communicative disorders), 160
- Auditing courses, 8, 53-54
- Aviation management technology, emphasis, 147-148
 - admission to emphasis, 25
- Baccalaureate degrees
 - majors, 13-14
 - second, 39-40
- Baccalaureate experience, 13
- Bachelor of Arts (B.A.) degree, language requirement for, 40-41
- Bachelor of General Studies (B.G.S.) degree
 - in College of Education, 99
 - in College of Engineering and Engineering Technology, 127-128
 - in College of Health and Human Sciences, 156
 - admission to, 25
 - in College of Liberal Arts and Sciences, 193-194
 - in College of Visual and Performing Arts, 330
- Bachelor of Science (B.S.) degree, special requirement for
 - in College of Liberal Arts and Sciences, 191-192
- Band instruments. *See* Instrumental music
- Bilingual/ESL courses, 118
- Biochemistry, emphasis, 221
- Biochemistry, Department of Chemistry and, 221-226
- Biodiversity and environmental restoration, emphasis, 251-252
- Biological Sciences, Department of, 214-220
 - courses, 215-220
 - major, 214
 - minor, 215
 - educator licensure, 214-215
- Biomedical engineering,
 - emphasis, 131
 - minor, 131
- Black studies
 - Center for, 363
 - courses, 361
 - minor, 363
- Board of Trustees, 374
- B.S. completion programs. *See* Completion programs
- B.S./M.S. integrated sequence, *See* industrial and systems engineering
- Burma Studies, Center for, 363
- Burmese language courses, 265
- Business administration
 - courses, 86
 - major, 85
 - minor, 74
- Business Analytics Using SAP Software, certificate, 94
- Business, College of, 73-75
 - interdisciplinary courses, 75
- Business innovation and entrepreneurship, minor, 85
- Business management, school, courses, 116
- Calendar, 4-6
- Campus, 11
- Campus Child Care, 67
- Campus Recreation, 68
- Campus transportation, 71
- Career Compass, College of Business, 73
- Career Services, 68
- Cars on campus (parking), 71
- Catalog, choice of, for graduation requirements, 41
- Center for Black Studies, 363
- Center for Burma Studies, 363
- Center for Latino and Latin American Studies, 363
- Center for Southeast Asian Studies, 363-364
- Ceramics (art), 334
- Certificate of undergraduate study, 8, 46
- Certificates of graduate study, 369
- Certification, teacher. *See* Educator licensure
- Certified Internal Auditor examination preparation, 77
- Certified Management Account examination preparation, 77
- Certified Public Accountant examination preparation, 77
- Certified Treasury Professional (C.T.P.) and Certified Treasury Professional Associate (C.T.P.A.) Associate preparation, 82
- C.F.A. examination preparation, 82
- CHANCE Program, 21-22
- Change of grade, 49
- Change of major, 45-46
 - regarding financial aid, 59
- Change of schedule, 46-47
- Chartered Financial Analyst (C.F.A.) preparation, 82
- Chemistry,
 - educator licensure, 222-223
 - emphasis, 221
 - major, 221-222
 - minor, 223
 - for pre-professional students, emphasis, 222
 - secondary teaching, emphasis, 222

- Chemistry and Biochemistry, Department of, 221-226
 - courses, 223-226
 - educator licensure, 222-223
- Chemistry placement examination policy, 221
- Child Care, 67
- Child development, emphasis, 166-167
- Child Development Laboratory, 71
- Child studies, family and,
 - courses, 171-172
 - major, 162-164
 - minor, 168
- Childhood studies, early, interdisciplinary major
 - admission to major, 25-26
 - emphasis in 04 licensure, 170-171
 - emphasis in 04 licensure with preschool special education approval, 122
- Chinese language courses, 265-266
- Chinese studies, minor, 258-259
- Choice of catalog for graduation requirements, 41
- C.I.A. examination preparation, 77
- Classic languages courses (Foreign Languages and Literatures), 264
- Classical studies, minor, 194
- Classification of students, 52
- Class load, 52
- Classroom disruption, 54-55
- CLEP, 50
- Clinical and practicum assignments,
 - in College of Health and Human Sciences, 155
- Clothing. *See* Textiles, apparel, and merchandising
- C.M.A. examination preparation, 77
- Coaching, minor, 107
- Cognitive studies, minor, 194-195
- College advising offices, 45
- College Board Advanced Placement Program, 50
- College Level Examination Program (CLEP), 50
- Combined degree program in physics and engineering, 204
- Communication, Department of, 227-235
- Communication, visual (art). *See* Visual communication
- Communication studies
 - courses, 231-232
 - major, 227-228
 - minor, 229-230
- Communicative Disorders, Allied Health and, School of, 159-164
 - courses, 163
 - major, 160
 - minor, 161
- Community colleges,
 - credit from, 51
 - transfer or reentrance from, 19-20, 22,
- Community Counseling Training Center at NIU, 71
- Community leadership and civic engagement,
 - certificate, 301
 - courses, 301-302
 - major, 300-301
 - minor, 301
- Compact benefits. *See* Illinois public community college graduates
- Comparative literature, minor, 195
- Comparative politics courses (Political Science), 317
- Competency examination, definition of, 8
- Completion programs
 - B.S. in nursing, 181-182
 - B.S. in public health, 184
- Composition (music),
 - courses, 344-345
 - emphasis, 343
- Computational mathematics, emphasis, 291
- Computational software, emphasis, 236
- Computer and electrical engineering, emphasis, 130
- Computer Science, Department of, 236-239
 - admission to major, 25
 - courses, 237-239
 - major, 236-237
 - minor, 237
- Computing services (information technology), 69
- Concentrations, graduate, 358
- Concentration, medieval studies, 196
- Concurrent enrollment, 8, 52
- Conduct and discipline regulations, 54, 378
- Conflict of interest policy, 376
- Contract major
 - in College of Education, 98-99
 - in College of Engineering and Engineering Technology, 127-128
 - in College of Health and Human Sciences, 156-157
 - in College of Liberal Arts and Sciences, 193-194
 - in College of Visual and Performing Arts, 330
- Cooperative Education/Internship in music, 343
- Core competency examination, definition of, 8
- Core competency requirements and course descriptions (in general education), 31-32
- Corequisite (CRQ), 8, 30
 - and student responsibility, 30
- Corporate communication, emphasis, 228
- Correspondence courses
 - credit for, 30
 - transfer credit for, 51
- Counseling, Adult and Higher Education, Department of, 101
 - courses, 101
- Counseling and Student Development Center, 68-69
- Counseling courses, 101
- Couple and Family Therapy Clinic, 71
- Course designators, 7
- Course information, 8, 30
- Course load, 52
- Course offerings, 30
 - See also* individual departments
- Course, repeating, 49
- Course selection, 52-53
 - in College of Liberal Arts and Sciences, 202
 - in pre-professional studies, 204
- C.P.A. examination preparation, 77
- Creative Writing, certificate, 246-247
- Credit, academic
 - by examination, 8, 50
 - from community colleges, 51
 - grades, 47
 - required for graduation, 30
 - transfer. *See* Transfer credit
- Criminal background check,
 - in nursing, 181
 - educator licensure, 44
- Criminology, certificate, 326
- Crosslisted courses (X designator), 7
- C.T.P. and C.T.P.A. examination preparation, 82
- Curriculum and instruction courses, 114-115
- Dance education
 - courses, 107-108
 - minor, 107
- Dance performance,
 - courses, 356-357
 - emphasis, 352-353
 - minor, 353
- DANTES, 50
- Deafness rehabilitation, minor, 161

- Dean's List
 - in College of Business, 75
 - in College of Education, 99
 - in College of Engineering and Engineering Technology, 128
 - in College of Health and Human Sciences, 155
 - in College of Liberal Arts and Sciences, 194
 - in College of Visual and Performing Arts, 330
- Declaration of major or minor, 45-46
- Defense Activities for Non-traditional Educational Support (DANTES), 50
- Definition of terms used in this catalog, 8-9
- Degree, declaration of, 45-46
- Degree requirements, 30, 40-41
- Degrees offered, graduate, 367-369
- Degrees offered, undergraduate, 13-16
 - in College of Business, 73
 - in College of Education, 98
 - in College of Engineering and Engineering Technology, 127
 - in College of Health and Human Sciences, 155
 - in College of Liberal Arts and Sciences, 191
 - in College of Visual and Performing Arts, 330
- Degrees with distinction, 41
 - in Honors Program, 14-15
 - See also individual departments
- Dentistry (pre-dentistry), 204
- Departmental requirements, definition of, 8
- Department-sponsored admission, 22
- Design (art), courses, 335-336
- Design and media arts, emphasis, 332-333
- Design and technology (theatre arts),
 - admission to emphasis, 25
 - emphasis, 352
- Dietetics. See Nutrition, dietetics, and hospitality management
- Digital Media Production, certificate, 230
- Dining. See housing and dining
- Direct reentrance, 22
- Disabilities
 - accommodations for students with, 54
 - learning behavior specialist I (special education), 122-123
 - services for students with. See Disability Resource Center
- Disability Resource Center, 69
- Discipline regulations, 54, 378
- Dismissal. See Academic probation and dismissal
- Distinction, degrees with, 41
 - in Honors Program, 14-15
 - See also individual departments
- Distributive studies area requirements and course descriptions (in general education), 32-34, 38-39
- Doctoral degrees, 367-369
- Dormitories, 66
 - rates for, 56
- Double emphasis, 40
- Double major, 40
- Drama. See English, Department of, and Theatre and Dance, School of
- Drawing (art), 333
- Dropping a class, 8, 47
- Early admission to the Graduate School, 370
- Early childhood education,
 - courses, 123-124
- Early childhood studies, interdisciplinary major, 121-122, 170-171
 - admission to major, 25-26
 - emphasis in 04 licensure, 170-171
 - emphasis in 04 licensure with preschool special education approval, 122
- Earth science education, emphasis, 276
- Economics, Department of, 240-243
 - courses, 241-243
 - major, 240
 - minor, 241
 - educator licensure, 240-241
- Education, College of, 98-100
 - interdisciplinary courses, 100
- Education, professional requirements in. See Educator Licensure Requirements
- Educational administration courses, 115
- Educational Psychology, See Leadership, Educational Psychology and Foundations
- Educational psychology courses, 115
- Educational Services and Programs, 21
- Educational Technology, Research and Assessment, Department of, 102-103
 - courses, 102-103
- Educator Licensure Requirements, 42-44
 - See also individual colleges and departments
- Elective, definition of, 8
- Electrical Engineering, Department of, 130-134
 - courses, 132-134
 - major, 130-131
 - minor, 131
- Electrical and computer engineering, emphasis, 130
- Electrical engineering technology,
 - emphasis, 145-146
 - minor, 149
- Elementary education,
 - admission to major, 26-27
 - courses, 119-120
 - major, 117
- Elementary mathematics education, 291-293
 - minor, 294
- Emphasis, 8
 - double emphases, 40
- Empirical theory and behavior courses (Political Science), 316
- Employment, student, 60
- Encumbrances, 8, 54
- Endorsements, 8, 43
 - middle grades, 43
 - secondary, 43
- Energy and environmental technology, emphasis, 148
- Energy studies, emphasis, 252
- Energy technology, minor, 149
- Engineering management, emphasis, 136-137
- Engineering and Engineering Technology, College of, 127-129
 - interdisciplinary courses, 129
- Engineering/physics combined degree program, 204
- English, Department of, 244-250
 - courses, 247-250
 - major, 244
 - minor, 246
- English proficiency in the classroom, oral, 55
- English studies leading to secondary licensure in English language arts, emphasis, 244-245
- Enrollment
 - certification fee, 56
 - concurrent, 52
 - for a limited period, 15. See also Visiting Students
- Ensemble courses (music), 347-348
- Enterprise, emphasis, 300
- Enterprise software, emphasis, 236
- Entrance. See Admission
- Environment and health, emphasis, 184
- Environmental, emphasis, 301
- Environmental geosciences, emphasis, 275
- Environmental management systems
 - courses, 362
 - minor, 149
- Environmental policy, emphasis, 253

- Environmental restoration, biodiversity and, emphasis, 251-252
- Environmental studies, 251-255
 courses, 255
 major, 251-254
 minor, 254-255
- ESL/Bilingual courses, 116
- Expenses, 56-57
- External education, in the College of Liberal Arts and Sciences, 204
- External programming. *See* Regional programs
- External Scholarships. *See* Scholarships
- Faculty. *See* individual departments
- Faculty, international, office, 366
- Faculty office hours, 12
- Family and child studies,
 admission to major, 27
 courses, 176-177
 major, 165-166
 minor, 171
- Family and consumer sciences
 education courses, 174-175
 educator licensure, 169-170
- Family and individual development, emphasis, 165
- Family, Consumer, and Nutrition Sciences, School of, 165-177
 courses, 172-177
 general minor, 171
- Family economics and management courses, 174
- Family social services, emphasis, 166
- Federal assistance, 59-60
- Fees, 56-57
 and registration, 56
 coverage, 56
 exceptions, 57
 payment of, 57
 regional courses, 56
 special, 56
- Fiber (art), 334
- Field Campus, Lorado Taft, 72
- Film. *See* Media studies
- Finance, Department of, 80-83
 certificate, 81
 courses, 82-83
 internships, 81
 major, 81
 minor, 81
- Financial aid, 58-65
 and withdrawal from university, 47-48
 eligibility requirements and general application procedures, 58
 office of, 58
- Fine arts, studio, 332-334
- Food (meal plans), 66
- Foreign language requirements for B.A., 40-41
- Foreign language residence program (College of Liberal Arts and Sciences), 204
- Foreign Languages and Literatures, Department of, 256-267
 courses, 260-267
 general courses, 266-267
 educator licensure, 258
- Foreign students. *See* International students
- Foreign study, 344-366
 in history, 283
- Forfeiture of transfer credit, 52
- Foundations of education, *See* Leadership, Educational Psychology and Foundations
- Foundations of education courses, 116
- Foundations of Educational Studies, certificate, 114
- French
 courses, 260
 major, 256-257
 minor, 259
- Freshmen
 academic probation, 49
 admission of, 17-19
 and catalog choice, 41
 dismissal, 49
 in 400-level courses, 53
 Warning, 49
- Gay, Lesbian, Bisexual, Transgender Resource Center, 69
- General education
 credit by examination, 8, 50
 core competencies, 31-32
 course descriptions, 31-32, 33-38
 course titles, 38-39
 distributive studies, 32-39
 requirements, 30-39
- General physical education/6-12 educator licensure, emphasis, 104
- General physical education/K-12 and 6-12 educator licensure, emphasis, 105
- General public health, emphasis, 183-184
- General regulations, 378-379
- General studies. *See* Bachelor of General Studies (B.G.S.) degree
- Geographic Information Systems, certificate, 270
- Geography, Department of, 268-274
 courses, 271-274
 emphasis, 268-269
 major, 268-269
 minor, 270
 educator licensure, 270
- Geology, emphasis, 275
- Geology and Environmental Geosciences, Department of, 275-281
 courses, 277-281
 major, 277-276
 minor, 277
 educator licensure, 276-277
- Geomatics, emphasis, 269
- German
 courses, 263-264
 major, 257
 minor, 259
- Gerontology, 157
 certificate, 157
 courses, 362
 minor, 157
- GLBT Studies. *See* LGBT Studies
- Global, emphasis, 301
- Global Studies, minor, 195-196
- Government and politics, American, courses, 315
- GPA. *See* grade point average
- Grade, change of, 49
- Grade appeals, 49
- Grade point average (GPA)
 computation of, 48
 definition of, 8
 in major, 30
 in minor, 40
 for satisfactory academic progress, 59
 required for graduation, 30
- Grades, 48-49
- Grading policy, multisection courses, Liberal Arts and Sciences, 192
- Grading system, 48
- Graduate courses
 not available to postbaccalaureates, 21
 undergraduates in, 53
- Graduate degrees, 367-369
- Graduate School, 367-369
 early admission to, 370
 student-at-large classification, 370

- Graduate students in undergraduate courses, 53
- Graduation
 - application for, 41
 - choice of catalog for, 41
 - fee for, 56
 - requirements for, 30-41
- Grants, 59-60
- Greek language courses, 264
- Half-session courses, definition of, 8
- Health administration, emphasis, 184
- Health and Human Sciences, College of, 155-158
 - interdisciplinary courses, 157-158
- Health education,
 - courses, 188-190
 - major, 185
 - minor, 186
- Health, environment and, emphasis, 184
- Health insurance, student, 67
- Health promotion, emphasis, 184-185
- Health Services, 66-67
- Health sciences, major, 160-161
- Health Studies, Nursing and, School of, 181-190
 - courses, 186-190
- Health systems engineering, emphasis, 136
- Hearing impaired students (Speech-Language-Hearing Clinic), 71
- High school preparation for college entrance, 19
- Higher education, courses, 101
- History, Department of, 282-289
 - courses, 283-289
 - major, 283
 - minor in, 283
 - educator licensure, 282-283
- History Center, Regional, 364
- Hold (encumbrance), 8, 54
- Holmes Student Center, 66
- Home economics. *See* Family, Consumer, and Nutrition Sciences, School of
- Homeland Security, certificate, 359-360
- Honors, academic, 14-15
 - Degrees with distinction, 40
 - See also* individual colleges and departments
- Honors courses, defined, 8
- Honors Program, 14-15
- Honors work, departmental. *See* individual departments
- Hospitality management, emphasis, 168-169
- Hour, semester, definition of, 9
- Housing and Dining, 66
 - rates for, 56
- Human experience, emphasis, 252-253
- Human resource management, emphasis, 84
- Human rights statement, 376
- Humanities and the arts, area requirements and course
 - descriptions (in general education), 32-34
- Humanities, Arts and (CLCE), emphasis, 300
- ID/activity card, lost, fee for, 56
- IELTS, 21
- Illinois Articulation Initiative Core Curriculum, 372-373
- Illinois Director Credential Certificate-Level 2, certificate, 172
- Illinois public community college graduates, 20
 - See also* Transfer credit
- Illinois residence regulations, 57
- Illinois State assistance, 60
- Illinois educator licensure. *See* Educator Licensure Requirements
- Illustration (art), 333
- ILTS Test of Academic Proficiency, 98
- Immigration Reform and Control Act regulations, 376
- Immunization policy, 18
- Incompletes, 8, 48-49
- Indonesian language courses, 266
- Industrial and Systems Engineering, Department of, 135-140
 - courses, 138-140
 - major, 135-137
- Industrial management and technology, emphasis, 147
- Infant Toddler Credential Certificate-Level 5, certificate, 172
- Information Systems, certificate, 94-95
- Information Systems, Department of Operations Management and, 93-97
- Information Systems, certificate, 94-95
- Information Technology, 69
- In-state students, definition of, 57
- Instructional technology courses, 102
- Instructional technology, training and evaluation, emphasis within the B.S. in applied management, 358-359
- Instrumental music
 - music education, 341
 - performance, 342
- Insurance, student, 67
 - refund of fee for, 56
- Integrated B.S./M.S. sequence in industrial and systems engineering, 137
- Integrated B.S. or B.A./J.D. Program in Political Science and the College of Law, 314
- Integrity, academic, 54
- Interactive Marketing, certificate, 90
- Inter-College and University-Wide Interdisciplinary Courses, 361-362
- Inter-College Interdisciplinary Certificates and Programs, 358-360
- Interdisciplinary certificates, 359-360
- Interdisciplinary concentration, medieval studies, 200
- Interdisciplinary courses, general, 361
- Interdisciplinary studies area requirements and course
 - descriptions (in general education), 37-38, 39
- International English Language Testing System (IELTS), 21
- International faculty, 366
- International politics, emphasis, 312-313
- International Programs, 364-366
 - in history, 283
- International relations courses (Political Science), 317-318
- International Student and Faculty Office, 366
- International students
 - and admission, 21
 - residence regulations, 57
 - student and faculty office for, 366
- International Training Office, 366
- Internships, 53
 - See also* other individual colleges and departments
- Introduction to NIU, 10-12
- Italian
 - courses, 261
 - minor, 259
- Japanese language courses, 265
- Japanese studies, minor, 259
- Jazz studies, performance, 342-343
- Jewelry (art), 334
- Journalism
 - courses, 233-234
 - major, 229
 - minor, 223
- Junior colleges. *See* Community colleges
- Justice and democracy: The American experiment,
 - emphasis, 313
- K-12 and 6-12 educator licensure, general physical education,
 - emphasis, 104-105
- Keyboard (music), 342
- Kinesiology and Physical Education, Department of, 104-113
 - courses, 107-113
 - minor, 106-107

- Kinesiology, major, 106
 - minor, 106-107
- Korean language courses, 265
- Language. *See* English and Foreign Languages and Literatures, Departments of
- Language and linguistics courses (English), 248
- Language and literature, emphases
 - French, 256
 - German, 257
 - Spanish, 257
- Language arts courses, 118
- Language requirement for Bachelor of Arts degree, 40-41
- Late payment fee, 56
- Latin language courses, 264
- Latino and Latin American studies
 - Center for, 363
 - minor, 196-197
- Latino Resource Center, 69
- Law, College of, 366
- Law (pre-law), 203
- Law, public (political science),
 - courses, 315-316
 - emphasis, 311-312
 - undergraduates in, 53
- Leadership and management, emphasis, 84
- Leadership, Educational Psychology and Foundations, Department of, 114-116
 - courses, 114-116
- Lean Six Sigma, certificate, 137
- Learning behavior specialist I, (special education),
 - emphasis, 122-123
- Leaves of Absence, 376
 - in College of Health and Human Sciences, 155
- Legal assistance, student, 70-71
- Legal Notices, 376-379
- Lesbian, Gay, Bisexual, Transgender Resource Center, 69
- Lesbian, Gay, Bisexual, and Transgender Studies,
 - certificate, 201
 - courses, 206
 - LGBT studies, minor, 197
- Liberal Arts and Sciences, College of, 191-206
 - college requirements for B.S. degree, 192-193
 - college requirements for minors, 193
 - interdisciplinary courses, 204-206
- Libraries, University, 370-371
- Licensure in English Language Arts courses, 248
- Limited admissions, 24-29
 - in acting emphasis, 24
 - in applied manufacturing technology emphasis, 24
 - in art and design education, 24
 - in athletic training major, 24
 - in aviation management technology emphasis, 25
 - in B.G.S. in Health and Human Sciences, 25
 - in computer science major, 25
 - in design and technology emphasis, 25
 - in early childhood studies interdisciplinary major, 25-26
 - in elementary education major, 26-27
 - in family and child studies major, 27
 - in medical laboratory science major, 27-28
 - in music majors, 28
 - in nuclear engineering technology area of study, 28
 - in nursing, 28-29
 - in sociology major, 29
 - in visual communication area of study, 29
- Limited retention, 29
 - See also* individual colleges and departments
- Linguistics, minor, 197-198
- Linguistics courses (English), 248
- Literacy Clinic Services, 99
- Literacy and Elementary Education, Department of, 117-120
 - courses, 118-120
- Literature, comparative, minor, 195
 - See also* English and Foreign Languages and Literatures, Departments of
- Literature courses (English), 248-250
- Load, class, 52
- Loans, 58-59
- Logistics, certificate, 137
- Lorado Taft Field Campus, 72
- Major, 30
 - admission to, 17
 - change of, 45-46
 - declaration of, 45-46
 - definition of, 9
 - programs available, 13-14
 - second, 40
- Management, Department of, 84-88
 - courses, 86-88
 - internship, 86
 - major, 84
- Management, operations. *See* Operations Management and Information Systems, Department of
- Manufacturing systems, emphasis, 136
- Manufacturing engineering technology
 - emphasis, 146
 - minor, 149
- Marketing, Department of, 89-92
 - courses, 91-92
 - internship, 90
 - major, 90
 - minor, 90
- Master's degrees, 367-369
- Mathematical Sciences, Department of, 290-299
 - courses, 295-297
 - general emphasis, 290
 - major, 290-293
 - minor, 293-294
- Mathematics education,
 - emphasis, 291-292
 - minor option, 294
 - elementary, minor, 294
- Mathematics placement and proficiency examination
 - policies, 290
- Mathematics requirement for B.S. degree in College of Liberal Arts and Sciences, 192-193
- Mathematics, sciences and, area requirements and course descriptions (in general education), 34-36, 39
- Maximum time frame, for satisfactory academic progress, 59
- Meal plans, 66
- Mechanical Engineering, Department of, 141-144
 - courses, 142-144
 - major, 141-142
 - minor, 142
- Mechatronics and Robotics, emphasis, 142
- Media arts, design and, emphasis, 332-333
- Media studies, emphasis, 228
- Medical care, 66-67
- Medical laboratory sciences, 159-160
 - admission to major, 27-28
 - courses, 162-163
- Medicine (pre-medicine), 204
- Medieval studies
 - concentration in, 200
 - courses, 362
- Meningococcal meningitis, 18
- Merchandising, textiles, apparel, and, *See* Textiles, Apparel, and Merchandising
- Metalwork and jewelry (art), 334

- Meteorology
 - courses, 274
 - major, 269
- Middle grades endorsements, 43
- Middle School Literacy, certificate, 117-118
- Military educational experience credit, 51
- Military Science, Department of, 178-180
 - courses, 179-180
 - in transfer, 52
 - minor, 179
- Military Student Services, 69
- Minor
 - declaration of, 45-46
 - definition of, 9
 - requirements, 40
- Mission and Scope, Northern Illinois University, 10-11
- Mobile Programming, certificate, 237
- Music, School of, 341-350
 - admission to majors, 28
 - courses, 343-350
 - majors, 341-343
- Music composition,
 - courses, 344-345
 - emphasis, 343
- Music education,
 - courses, 348-349
 - emphasis, 341-342
- Music ensemble courses, 347-348
- Music history and literature courses, 344
- Music performance,
 - courses, 345-347
 - emphasis, 342-343
- Music theory and composition courses, 344-345
- N grade in transfer credit, 51-52
- Nanotechnology, certificate, 128
- Nondegree students, 9
- Non-government organization, emphasis, 253-254
- Non-Governmental Organization Leadership and Development, Center for (NGOLD), 300-302
- Nontraditional and Off-Campus Student Services, 70
- Nuclear engineering technology, emphasis, 146
 - admission to emphasis, 28
- Numbering of courses, 8
- Nursing, 181-183
 - admission to major, 28-29
 - completion program, 181-182
 - courses, 186-188
 - major, 182-183
- Nursing and Health Studies, School of, 181-190
 - courses, 186-190
- Nutrition, dietetics, and hospitality administration
 - courses, 172-174
 - major, 168-169
 - minor, 171
- Nutrition, health and wellness, emphasis, 169
- Off-Campus and Non-Traditional Student Services, 70
- Off-campus courses (regional programs), 72
 - special fee for, 56
 - See also individual departments
- Office hours
 - faculty, 11
 - university, 11
- Ombudsperson, 70
- Operations Management and Information Systems, Department of, 93-97
 - courses, 95-97
 - degree with honors, 94
 - internships, 94
 - major, 93-94
- Optometry (pre-optometry), 204
- Oral English proficiency, 55
- Orchestral instruments. See Instrumental music
- Organizational/corporate communication, emphasis, 228
- Orientation, 71-72
 - fee for international student orientation, 56
 - for international students, 366
- Other Academic Units, 363-371
- Other graduation requirements, 40-41
- Out-of-state employment in public schools, 44
- Overload, class, 52
- PACE (Rate of Completion Requirement, for financial aid), 58
- Painting (art), 333
- Parking, 71
- Part-time student, 9
- Passport to the Business World, College of Business, 73
- Payment of fees, 57
- Performance,
 - dance,
 - courses, 356-357
 - emphasis, 352-353
 - music,
 - courses, 345-347
 - emphasis, 342-343
- Pharmacy
 - degree affiliation, 203
 - pre-pharmacy, 204
- Philosophy, Department of, 303-305
 - courses, 303-305
 - major, 303
 - minor, 303
- Philosophy of Education, certificate, 114
- Photography (art), 333
- Physical Education, and Kinesiology, Department of, 104-113
 - courses, 108-113
 - major, 104-105
 - educator licensure, 104-105
- Physical therapy, courses, 163
- Physics, Department of, 306-310
 - courses, 308-310
 - major, 306-307
 - minor, 308
 - educator licensure, 307
- Physics/engineering joint degree program, 204
- Physics, secondary school teaching, emphasis, 306
- Placement
 - advanced, 50
 - in chemistry, 221
 - in mathematics, 290
- Policies, academic, 44-45
- Polish language courses, 265
- Political Science, Department of, 311-318
 - courses, 315-318
 - integrated B.S. or B.A./J.D. program with College of Law, 314
 - major, 311-313
 - minor, 314
 - educator licensure, 313-314
- Political theory, courses (Political Science), 316-317
- Politics, emphasis, 311
- Politics, American government and, courses, 315
- Portuguese language courses, 263
- Postbaccalaureate students, 21
- Practicums, 53
 - See also individual colleges and departments
- Pre-physical therapy, emphasis, 160-161

- Pre-professional studies, 202-204
 - advisement, 203
 - course selection for biomedical pre-professional students, 204
 - pre-dentistry, 204
 - pre-law, 203
 - pre-medicine, 204
 - pre-optometry, 204
 - pre-pharmacy, 204
 - pre-veterinary medicine, 204
- Prerequisite (PRQ), 9, 30
 - and student responsibility, 30
- Press, University, 371
- Printmaking (art), 333
- Private Scholarships. *See* Scholarships
- Probability and statistics (mathematical sciences)
 - courses, 297-298
 - emphasis, 291
 - minor, 294
- Probation. *See* Academic probation and dismissal
- Productivity, minor, 149
- Professional communication, minor, 198
- Professional education requirements. *See* Educator Licensure Requirements
- Professional examination preparation in accountancy, 77
- Professional physics for graduate study, emphasis, 306
- Professional schools, preparation for, 202
- Professional Selling, certificate, 91
- Professional Teaching Practices, certificate, 99
- Proficiency examination, 9, 50
 - See also* Credit by examination and Department of Mathematical Sciences
- Programs. *See* Degrees offered
- Psychological Services Center, 71
- Psychology, Department of, 319-322
 - courses, 320-322
 - major, 319
 - minor, 320
 - educator licensure, 319-320
- Psychology, educational, courses, 115
- Public Administration, Department of, 323-324
 - courses, 323
 - minor, 207
- Public administration and service, emphasis, 312
 - courses, 316
- Public and Global Affairs, School of, 207
- Public communication, rhetoric and (communication studies), emphasis, 227-228
- Public health
 - B.S. completion program, 184
 - courses, 188-190
 - major, 183-185
 - minor, 185-186
- Public health and health education
 - courses, 188-190
 - programs, 183-186
- Public law,
 - courses, 315-316
 - emphasis, 311-312
- Public policy courses (Political Science), 316
- Public safety, emphasis within the B.S. in applied management, 358
- Public Sector Leadership, certificate, 323
- Radio. *See* Media studies
- Rate of Completion Requirement (PACE), for financial aid, 58
- Reading courses, 118-119
- Readmission of former students, 9, 22
- Recognized institution, definition of, 9
- Records: academic, 54
 - and policy for release of information, 376-378
- Recreation, Campus, 68
- Reentrance, 23
 - and graduation requirements, 41
 - of Illinois public community college graduates, 23
- Refund Policies, 56-57
- Regional History Center, 364
- Regional programs, 72
 - special fee for, 56
- Regional sites, 11, 72
- Registration, 45
- Regulations
 - academic, 45-55
 - governing student teaching assignments, 42-44
 - See also* individual departments
 - residence, 57
 - See also* Conduct and discipline
- Rehabilitation services
 - courses, 163-164
 - emphasis, 161
- Reinstatement, 9, 23
- Religion courses, in transfer, 52
- Religious observances and the academic schedule, 54
- Religious Studies, certificate, 201
- Repeating a course, 49
 - for transfer students, 52
- Requirements, departmental, definition of, 8
- Requirements for graduation, 30-41
 - See also* individual colleges and departments
- Research and assessment courses, 102-103
- Residence
 - and regulations governing tuition charges, 57
 - requirement for graduation, 30
- Residence halls, 66
 - meal plans, 66
 - rates for, 56
- Responsibility, student, 54-55, 376
- Restricted enrollment. *See* Limited admissions
- Retention, limited, 29
 - See also* Academic probation and dismissal and individual colleges, departments, and majors
- Retention in educator licensure, 43-44
 - See also* individual departments
- Rhetoric and public communication, emphasis, 227-228
- R.N.-B.S. in nursing completion program, 181-182
- Robotics, Mechatronics and, emphasis, 142
- Room and board, 66
 - rates for, 56
- ROTC
 - Air Force, 180
 - Army, 178
- Russian
 - courses, 264
 - minor, 259
- Safety, minor, 149
- SAT scores, 18
- Satisfactory academic progress for undergraduates/postbaccalaureates, 58-59
- Schedule changes, 46-47
- Scholarships, 60-65
 - for International Programs, 364
 - for ROTC students, 178
- Scholastic honors, 41
 - See also* Honors Program
- Scholastic load, 52
- School business management courses, 116
- School of Public and Global Affairs, 207

- Science teaching
 - biology, 214-215
 - chemistry, 222
 - earth science, 276
 - mathematics, 291-292, 294
 - physics, 307
- Sciences and mathematics, area requirements and course descriptions (in general education), 34-36, 39
- Sculpture (art), 334
- Second baccalaureate degree, 40
- Second emphasis, 39
- Second major, 40
- Secondary education. *See* Educator Licensure Requirements and individual departments
- Secondary endorsements, 43
- Selection of courses, 52-53
- Semester hour, definition of, 9
- Senior citizens, tuition waivers for, 60
- Service Management, certificate, 91
- Services, University, 66-72
- 60-80 rule. *See* Reentrance of Illinois public community college graduates
- Social entrepreneurship,
 - certificate, 86
 - minor, 85-86
- Social sciences, area requirements and course descriptions (in general education), 36-37, 39
- Social services, family, emphasis, 166
- Sociology, Department of, 325-329
 - admission to major, 29
 - courses, 326-329
 - major, 325
 - minor, 326
 - educator licensure, 325-326
- Software development, emphasis, 236
- Southeast Asian studies
 - Center for, 363-364
 - courses, 206
 - minor, 198-199
- Spanish
 - courses, 261-263
 - major, 257-258
 - minor, 259
- Special admission, 21-22
- Special and Early Education, Department of, 121-126
 - courses, 123-126
- Special education,
 - courses, 124-125
 - major, 122-123
- Special fees, 56
- Special requirements, in College of Health and Human Sciences, 155
- Special requirements for the B.S. degree,
 - in electrical, industrial and systems, and mechanical engineering, 41
 - in the College of Liberal Arts and Sciences, 41, 191-192
- Special topics courses, 30
- Speech. *See* Communication, Department of
- Speech-Language-Hearing Clinic, 71
- Sponsored admission, 22
- Sport management courses, 113
- Sports, recreational, 68
- Standing, academic. *See* Academic probation and dismissal
- State assistance, 60
- State requirements for educator licensure, College of Education, 98
- Statistics and probability (mathematical sciences),
 - courses, 297-298
 - emphasis, 291
 - minor, 294
- Storage in university buildings, 376
- Student-at-large classification, 21, 53, 370
- Student Academic success, Office of, 70
- Student center, 66
- Student, classification, 52
- Student employment, 60
- Student Engagement and Experiential Learning, Office of, 70
- Student financial aid, 58-65
 - Office of, 58
- Student health insurance, 67
- Student information and records, 54, 376-378
- Student responsibility, 54-55, 376
- Student teaching. *See* Educator Licensure Requirements and individual departments
- Students, classification of, 52
- Students' Legal Assistance Office, 70-71
- Students with disabilities, 54
- Studio art,
 - courses, 338-340
 - major, 332-334
- Study Abroad Office, 364
 - cosponsored study abroad and exchange programs, 364-366
 - courses, 362
- S/U grading, 43, 48, 121
- Sustainable energy, emphasis, 142
- Sustainable engineering, minor, 137
- Taft Field Campus, 72
- Tagalog language courses, 266
- Teacher Certification Requirements, *See* Educator Licensure Requirements,
 - See also* individual departments
- Technology, Department of, 145-154
 - courses, 149-154
 - major, 145-148
- Technology, design and, theatre,
 - admission to emphasis, 25
 - emphasis, 352
- Television. *See* Communication, Department of
- Test of Academic Proficiency (ILTS), 98
- Test of English as a Foreign Language (TOEFL) and international students, 21
- Testing Services, Office of, 70
- Textiles, apparel, and merchandising,
 - courses, 175-176
 - major, 167-168
 - minor, 172
 - See also* Fiber (art)
- Thai language courses, 266
- Theatre and Dance, School of, 351-357
 - courses, 353-357
- Theatre arts,
 - courses, 353-356
 - major, 352-353
- Theatre studies,
 - major, 351
 - minor, 353
- Therapy, physical. *See* Health sciences
- 3-D studio (art),
 - courses, 338-340
 - emphasis, 334
- Time arts (art), 332-333
- TOEFL, 21
- Transcript
 - and encumbrance, 54
 - definition of, 9
 - fee for, 56
 - See also* Admission

- Transfer credit, 51-52
 - in College of Business, 74
 - of Illinois Articulation Initiative Credit to NIU, 51
 - for postbaccalaureate students, 21
 - See also Illinois Articulation Initiative Core Curriculum
- Transfer students
 - admission of, 19-21
 - choice of catalog for graduation requirements, 41
- Translation and business, emphases
 - French, 256-257
 - German, 257
 - Spanish, 257-258
- Transportation, campus, 71
- Tuition and fees, 56-57
- Tuition waivers for senior citizens, 60
- Tutoring. See ACCESS tutoring program
- 2-D studio (art),
 - courses, 338-340
 - emphasis, 333
- Undergraduate academic programs, 13-16
- Undergraduates in courses for graduate credit, 53
- Undergraduates in graduate courses for undergraduate credit, 53
- Undergraduates in law courses, 53
- UNIV courses, 361
- University Administration, 374-375
- University graduation requirements, 30-39
- University Honors Program, 15
- University hours, 11
- University Libraries, 370-371
- University Press, 371
- University Services, 62-72
- University-wide interdisciplinary courses, 361
- Upper-division courses, 30
- Urban studies, minor, 199
- Veterans
 - assistance and educational benefits for, 59-60
 - in ROTC, 178
- Veterinary medicine (pre-veterinary medicine), 204
- Vision impairments (special education),
 - courses, 125-126
 - emphasis, 123
- Visiting students, 22
 - definition of, 9
- Visual and Performing Arts, College of, 330
- Visual communication (art), 333
 - admission to area of study, 29
- Vocal music
 - music education, 342
 - performance, 342
- Water, emphasis, 254
- Withdrawal, 9
 - and refund policy, 47-48
 - from a course, 47
 - from the university, 47-48
- Women and Gender Studies, certificate, 201-202
- Women's Resource Center, 71
- Women's studies
 - courses, 206
 - minor, 199
- Workshop courses
 - credit limitation for, 30
 - tuition for, 56
- Writing courses (English), 247-248